

GenCore version 5.1.6  
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3M protein - protein search, using sw model

run on: December 1, 2003, 07:18:41 ; Search time 6.73171 Seconds  
(without alignments)  
150.847 Million cell updates/sec

Title: US-10-032-658-4

Perfect score: 131

Sequence: 1 XCTGADCTCTACTCGXCPNA 24

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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3: /cgn2\_6/ptodata/1/iaa/6A\_COMB.pdp.\*

4: /cgn2\_6/ptodata/1/iaa/6B\_COMB.pdp.\*

5: /cgn2\_6/ptodata/1/iaa/PTCUS\_COMB.pdp.\*

6: /cgn2\_6/ptodata/1/iaa/backfiles1.pdp.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	126	96.2	124	4	US-08-882-907-17
2	126	96.2	124	4	US-08-882-907-19
3	126	96.2	148	4	US-08-882-907-15
4	124	94.7	24	4	US-08-882-907-4
5	124	94.7	112	4	US-08-882-907-11
6	124	94.7	112	4	US-08-882-907-13
7	97	74.0	108	1	US-08-485-359-2
8	97	74.0	108	1	US-08-569-594-2
9	97	74.0	108	5	PT-US96-08815-2
10	97	74.0	109	1	US-08-485-359-4
11	97	74.0	109	1	US-08-569-594-4
12	97	74.0	109	5	PCT-US96-08815-4
13	73.5	56.1	2211	4	US-09-738-884-1
14	73	55.7	1917	4	US-09-627-650B-5
15	73	55.7	1917	4	US-09-436-063C-5
16	71	54.2	1345	2	US-08-977-767-3
17	70.5	53.8	120	3	US-08-508-761B-22
18	68.5	52.3	45	4	US-08-900-230-14
19	68.5	52.3	2088	4	US-09-548-372D-13
20	68.5	52.3	2088	4	US-09-548-367D-13
21	68.5	52.3	2088	4	US-09-551-853D-13
22	67.5	51.5	1652	4	US-09-627-650B-1
23	67.5	51.5	1652	4	US-09-436-063C-1
24	67.5	51.5	2508	4	US-09-627-650B-7
25	67.5	51.5	2508	4	US-09-436-063C-7
26	67.5	51.5	2544	4	US-09-627-650B-3
27	67.5	51.5	2544	4	US-09-436-063C-3

28 67.5 51.5 2601 4 US-09-627-650B-9 Sequence 9, Appli  
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30 67 51.1 1128 4 US-09-627-650B-11 Sequence 11, Appl  
31 67 51.1 1128 4 US-09-436-063C-11 Sequence 11, Appl  
32 66.5 50.8 801 1 US-07-906-349A-6 Sequence 6, Appli  
33 66.5 50.8 1400 4 US-08-630-915A-37 Sequence 37, Appl  
34 66 50.4 908 4 US-08-714-741-44 Sequence 44, Appl  
35 65.5 50.0 1417 4 US-08-900-230-3 Sequence 3, Appli  
36 63.5 48.5 57 1 US-07-609-716-56 Sequence 56, Appl  
37 61 46.6 47 3 US-08-482-085B-91 Sequence 91, Appl  
38 60 45.8 45 4 US-08-900-230-17 Sequence 17, Appl  
39 60 45.8 50 4 US-08-900-230-8 Sequence 8, Appli  
40 59.5 45.4 45 4 US-08-900-230-11 Sequence 11, Appl  
41 59 45.0 45 4 US-08-900-230-45 Sequence 45, Appl  
42 59 45.0 3788 4 US-09-336-447A-76 Sequence 76, Appl  
43 58.5 44.7 50 4 US-08-900-230-58 Sequence 58, Appl  
44 58.5 44.7 54 1 US-08-279-058B-24 Sequence 24, Appl  
45 58.5 44.7 54 4 US-08-828-323-24 Sequence 24, Appl

#### ALIGNMENTS

#### RESULT 1

US-08-882-907-17  
; Sequence 17, Application US/08882907  
; Patent No. 6392024  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; APPLICANT: Liou, Yih-Cherng  
; APPLICANT: Walker, Virginia K.  
; APPLICANT: Davies, Peter L.  
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 17:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 124 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-08-882-907-17

Query Match 96.2%; Score 126; DB 4; Length 124;

Best Local Similarity 87.0%; Pred. No. 1.3e+08;

Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CTGADCTCTACTCGXCPNA 24

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Db 30 CTGADCTCTACTCGXCPNA 52

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; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 148 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-882-907-15

Query Match          96.2%; Score 126; DB 4; Length 148;
Best Local Similarity 87.0%; Pred.No.1.5e-08;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      2 CTGXADCTCTXACTGCGKCPNA 24
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Db      30 CTGAADCTCTAAGTGGNCPNA 52

RESULT 4
US-08-882-907-4
; Sequence 4, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Peptide

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; LOCATION: 1..24
; OTHER INFORMATION: /note= "N-terminal amino acid sequence
; OTHER INFORMATION: of YL-1, YL-2, YL-3 and YL-4"
; FEATURE:
; NAME/KEY: Modified-site
; OTHER INFORMATION: /product= "OTHER"
; LOCATION: 1
; OTHER INFORMATION: /note= "Xaa = Gln or His"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 5
; OTHER INFORMATION: /product= "OTHER"
; OTHER INFORMATION: /note= "Xaa = Ala or Gly"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 13
; OTHER INFORMATION: /product= "OTHER"
; OTHER INFORMATION: /note= "Xaa = Ala, Asp or Gly"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 20
; OTHER INFORMATION: /product= "OTHER"
; OTHER INFORMATION: /note= "Xaa = Asn or Ser"
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; US-08-882-907-4
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; Query Match 94.7%; Score 124; DB 4; Length 24;
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; Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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; QY 2 CTGXADCTCTXACTGCGKCPNA 24
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; Db 2 CTGXADCTCTXACTGCGKCPNA 24
;
; RESULT 5
; US-08-882-907-11
; Sequence 11, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
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; MOLECULE TYPE: protein
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; US-08-882-907-13
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; MOLECULE TYPE: protein
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; US-08-882-907-11
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; Query Match 94.7%; Score 124; DB 4; Length 112;
; Best Local Similarity 87.0%; Pred. No. 2.1e-08;
; Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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; QY 2 CTGXADCTCTXACTGCGKCPNA 24
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; Db 30 CTGGADCTCTGACTGCGKCPNA 52
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; RESULT 6
; US-08-882-907-13
; Sequence 13, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
;
; MOLECULE TYPE: protein
;
; US-08-882-907-13
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; MOLECULE TYPE: protein
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; US-08-882-907-13
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; Query Match 94.7%; Score 124; DB 4; Length 112;
; Best Local Similarity 87.0%; Pred. No. 2.1e-08;
; Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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; QY 2 CTGXADCTCTXACTGCGKCPNA 24
; | | | | | | | | | | | | | | | | | | | | | |
; Db 30 CTGGADCTCTGACTGCGKCPNA 52
;
; RESULT 7
; US-08-465-359-2
; Sequence 2, Application US/08465359
; Patent No. 5627051
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
;
```

ADDRESSEE: Barnes & Thornburg  
STREET: 11 South Meridian  
CITY: Indianapolis  
STATE: Indiana  
COUNTRY: USA  
ZIP: 46204  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA: US/08/485,359  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Lamert, Steven R.  
REGISTRATION NUMBER: 27653  
REFERENCE/DOCKET NUMBER: 835910-25377  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (317) 231-7258  
TELEFAX: (317) 231-7433  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 108 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: YES  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Dendroides canadensis  
US-08-485-359-2

Query Match 74.0%; Score 97; DB 1; Length 108;  
Best Local Similarity 65.2%; Pred. No. 3.3e-05;  
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

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DB 27 CTGSDCRSCTVSVCTDCQNCNCPNA 49

RESULT 8  
US-08-569-594-2  
Sequence 2, Application US/08569594  
GENERAL INFORMATION:  
APPLICANT: Duman, John G.  
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
REFERENCE/DOCKET NUMBER: 835910-25377  
NUMBER OF SEQUENCES: 9  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Barnes & Thornburg  
STREET: 11 South Meridian  
CITY: Indianapolis  
STATE: Indiana  
COUNTRY: USA  
ZIP: 46204  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
FILING DATE:  
CLASSIFICATION: 800  
ATTORNEY/AGENT INFORMATION:  
NAME: Lamert, Steven R.  
REGISTRATION NUMBER: 27653  
REFERENCE/DOCKET NUMBER: 835910-25377  
TELECOMMUNICATION INFORMATION:

TELEPHONE: (317) 231-7258  
TELEFAX: (317) 231-7433  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 108 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: YES  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Dendroides canadensis  
US-08-569-594-2

Query Match 74.0%; Score 97; DB 1; Length 108;  
Best Local Similarity 65.2%; Pred. No. 3.3e-05;  
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24  
|||:|||||:|||||  
DB 27 CTGSDCRSCTVSVCTDCQNCNCPNA 49

RESULT 9  
PCT-US96-08815-2  
Sequence 2, Application PC/TUS9608815  
GENERAL INFORMATION:  
APPLICANT: Duman, John G.  
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
REFERENCE/DOCKET NUMBER: 835910-27026  
NUMBER OF SEQUENCES: 9  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Barnes & Thornburg  
STREET: 11 South Meridian  
CITY: Indianapolis  
STATE: Indiana  
COUNTRY: USA  
ZIP: 46204  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Lamert, Steven R.  
REGISTRATION NUMBER: 27653  
REFERENCE/DOCKET NUMBER: 835910-27026  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (317) 231-7258  
TELEFAX: (317) 231-7433  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 108 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: YES  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Dendroides canadensis  
PCT-US96-08815-2

Query Match 74.0%; Score 97; DB 5; Length 108;  
Best Local Similarity 65.2%; Pred. No. 3.3e-05;  
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTXACTGCGXCPNA 24  
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DB 27 CTGSDCRSCTVSVCTDCQNCNCPNA 49



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RESULT 10
US-08-485-359-4
; Sequence 4, Application US/08485359
; Patent No. 5627051
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,359
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-25377
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-485-359-4

Query Match 74.0%; Score 97; DB 1; Length 109;
Best Local Similarity 65.2%; Pred. No. 3.4e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTCGADCTCTACTGCGKCPNA 24
Db 27 CTGGDCRSCTVSTDCQNCNCPNA 49

RESULT 11
US-08-569-594-4
; Sequence 4, Application US/08569594
; Patent No. 5633451
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/569,594
; FILING DATE:
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-25377
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-569-594-4

Query Match 74.0%; Score 97; DB 1; Length 109;
Best Local Similarity 65.2%; Pred. No. 3.4e-05;
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTCGADCTCTACTGCGKCPNA 24
Db 27 CTGGDCRSCTVSTDCQNCNCPNA 49

RESULT 12
PCT-US96-08815-4
; Sequence 4, Application PC/TUS9608815
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; DENDROIDES ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/08815
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-27026
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
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; ANTI-SENSE: NO  
; ORIGINAL SOURCE:  
; ORGANISM: Dendroides canadensis  
PCT-US96-08815-4

Query Match 74.0%; Score 97; DB 5; Length 109;  
Best Local Similarity 55.2%; Pred. No. 3.4e-05;  
Matches 15; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 CTGXADCTCTACTCGGCPNA 24  
|||:|||||:  
Db 27 CTGSDCRCTVSCDQCQCPNA 49

RESULT 13

US-09-738-884-1  
; Sequence 1, Application US/09738884  
; Patent No. 6391606  
; GENERAL INFORMATION:  
; APPLICANT: GUEGLER, Karl et al  
; TITLE OF INVENTION: ISOLATED HUMAN PHOSPHOLIPASE PROTEINS,  
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN PHOSPHOLIPASE  
; TITLE OF INVENTION: PROTEINS, AND USES THEREOF  
; FILE REFERENCE: CL000849  
; CURRENT APPLICATION NUMBER: US/09/738,884  
; CURRENT FILING DATE: 2000-12-18  
; NUMBER OF SEQ ID NOS: 5  
; SOFTWARE: FASTSEQ for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 2211  
; TYPE: PRT  
; ORGANISM: Human  
US-09-738-884-1

Query Match 56.1%; Score 73.5; DB 4; Length 2211;  
Best Local Similarity 56.5%; Pred. No. 0.28;  
Matches 13; Conservative 0; Mismatches 7; Indels 3; Gaps 1;

QY 2 CTGXAD---CTGCTXACTGCGXC 21  
|||:|||||:  
Db 396 CTGATCCACTCTATCTGCACC 418

RESULT 14

US-09-627-650B-5  
; Sequence 5, Application US/09627650B  
; Patent No. 6408872  
; GENERAL INFORMATION:  
; APPLICANT: Bamber, Bruce  
; APPLICANT: Jorgensen, Erik  
; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
; TITLE OF INVENTION: Methods Related Thereto  
; FILE REFERENCE: 21101.000903  
; CURRENT APPLICATION NUMBER: US/09/627,650B  
; CURRENT FILING DATE: 2000-07-28  
; PRIOR APPLICATION NUMBER: 09/436,063  
; PRIOR FILING DATE: 1999-11-08  
; PRIOR APPLICATION NUMBER: 60/107,727  
; PRIOR FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 50  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 5  
; LENGTH: 1917  
; TYPE: PRT  
; ORGANISM: Caenorhabditis elegans  
US-09-627-650B-5

Query Match 55.7%; Score 73; DB 4; Length 1917;  
Best Local Similarity 52.2%; Pred. No. 0.28;  
Matches 12; Conservative 1; Mismatches 10; Indels 0; Gaps 0;

QY 2 CTGXADCTCTACTCGGCPNA 24  
|||:|||||:

Db 1693 CTGGGCTTACTTTCATCCGCGAGA 1715

RESULT 15

US-09-436-063C-5  
; Sequence 5, Application US/09436063C  
; Patent No. 6407210  
; GENERAL INFORMATION:  
; APPLICANT: Bamber, Bruce  
; APPLICANT: Jorgensen, Erik  
; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
; TITLE OF INVENTION: Methods Related Thereto  
; FILE REFERENCE: P-1095corrected  
; CURRENT APPLICATION NUMBER: US/09/436,063C  
; CURRENT FILING DATE: 1999-11-08  
; PRIOR APPLICATION NUMBER: 60/107727  
; PRIOR FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 18  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 5  
; LENGTH: 1917  
; TYPE: PRT  
; ORGANISM: Caenorhabditis elegans  
US-09-436-063C-5

Query Match 55.7%; Score 73; DB 4; Length 1917;  
Best Local Similarity 52.2%; Pred. No. 0.28;  
Matches 12; Conservative 1; Mismatches 10; Indels 0; Gaps 0;

QY 2 CTGXADCTCTACTCGGCPNA 24  
|||:|||||:

Db 1693 CTGGGCTTACTTTCATCCGCGAGA 1715

Search completed: December 1, 2003, 07:30:00  
Job time : 6.73171 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 1, 2003, 07:18:41 ; Search time 31.4146 Seconds  
(without alignments)  
150.847 Million cell updates/sec

Title: US-10-032-658-11

Perfect score: 664

Sequence: 1 MAFKTCGFSKKWLVIAVIVM.....DSTNCYKATACINSTGCGPH 112

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:\*

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- 4: /cgn2\_6/prodata/1/iaa/5B\_COMB.pep:\*
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- 6: /cgn2\_6/prodata/1/iaa/5B\_COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	664	100.0	112	4	US-08-882-907-11
2	603	90.8	124	4	US-08-882-907-17
3	599	90.2	112	4	US-08-882-907-13
4	599	90.2	124	4	US-08-882-907-19
5	487	73.3	148	4	US-08-882-907-15
6	377.5	56.9	108	1	US-08-485-359-2
7	377.5	56.9	108	1	US-08-569-594-2
8	377.5	56.9	108	5	PCT-US96-08815-2
9	361	54.4	109	1	US-08-485-359-4
10	361	54.4	109	1	US-08-569-594-4
11	361	54.4	109	5	PCT-US96-08815-4
12	163.5	24.6	1917	4	US-09-627-650B-5
13	163.5	24.6	1917	4	US-09-436-063C-5
14	160.5	24.2	1345	2	US-08-977-767-3
15	160	24.1	2211	4	US-09-738-884-1
16	159.5	24.0	120	3	US-08-508-761B-22
17	157.5	23.7	1417	4	US-08-900-230-3
18	157	23.6	1128	4	US-09-627-650B-11
19	157	23.6	1128	4	US-09-436-063C-11
20	157	23.6	1652	4	US-09-627-650B-1
21	157	23.6	1652	4	US-09-436-063C-1
22	157	23.6	2508	4	US-09-627-650B-7
23	157	23.6	2508	4	US-09-436-063C-7
24	157	23.6	2544	4	US-09-627-650B-3
25	157	23.6	2544	4	US-09-436-063C-3
26	157	23.6	2601	4	US-09-627-650B-9
27	157	23.6	2601	4	US-09-436-063C-9

Priority

28	141.5	21.3	2088	4	US-09-548-372D-13	Sequence 13, Appl
29	141.5	21.3	2088	4	US-09-548-367D-13	Sequence 13, Appl
30	141.5	21.3	2088	4	US-09-551-853D-13	Sequence 13, Appl
31	139	20.9	1400	4	US-08-630-915A-37	Sequence 37, Appl
32	130.5	19.7	801	1	US-07-906-349A-6	Sequence 6, Appl
33	128	19.3	908	4	US-08-714-741-44	Sequence 44, Appl
34	124	18.7	24	4	US-08-882-907-4	Sequence 4, Appl
35	117	17.6	143	3	US-08-990-823-112	Sequence 112, App
36	117	17.6	143	4	US-08-477-135A-112	Sequence 112, App
37	115.5	17.4	102	3	US-08-974-022-53	Sequence 53, Appl
38	115.5	17.4	102	3	US-08-795-445A-53	Sequence 53, Appl
39	115.5	17.4	102	3	US-08-795-447A-53	Sequence 53, Appl
40	115.5	17.4	102	3	US-08-974-186-53	Sequence 53, Appl
41	115.5	17.4	102	3	US-08-795-446B-53	Sequence 53, Appl
42	114	17.2	2556	1	US-08-083-590A-20	Sequence 20, Appl
43	114	17.2	2556	3	US-08-532-384-20	Sequence 20, Appl
44	113	17.0	341	2	US-08-209-521-11	Sequence 11, Appl
45	113	17.0	2523	1	US-08-185-432-18	Sequence 18, Appl

ALIGNMENTS

RESULT 1  
US-08-882-907-11  
; Sequence 11, Application US/08882907  
; Patent No. 6392024  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; APPLICANT: Liou, Yih-Cherng  
; APPLICANT: Walker, Virginia K.  
; APPLICANT: Davies, Peter L.  
; TITLE OF INVENTION: Terebrio Antifreeze Proteins  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 112 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-882-907-11

Query Match 100.0%; Score 664; DB 4; Length 112;  
Best Local Similarity 100.0%; Pred. No. 4.1e-52;  
Matches 112; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MAFKTCGFSKKWLVIAVIVMCLCTECYCHTGGADCTCTDAGTCGNCNPNHFTCTDSKN 60

DB 1 MAFKTCGFSKKWLVIAVIVMCLCTECYCHTGGADCTCTDAGTCGNCNPNHFTCTDSKN 60



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Query Match          56.9%; Score 377.5; DB 1; Length 108;
Best Local Similarity 64.6%; Pred. No. 8.3e-27;
Matches 64; Conservative 13; Mismatches 21; Indels 1; Gaps 1;

Qy 13 LVIAIVMCLCTECYCHCTGGADCTCTDACTGCGNCPNAHT-CTDSKNCVKAACTCTGST 71
      |||:::|
Db 10 LVISVLMTVCHCEYGCQTGGSDCRCSCTVSDCQCNPNARTCTRSSNCINALTCTDSY 69
      |||:::|

Qy 72 KCNTARTCTNSKDCFEAKTCTDSTNCKYKATCTNSTGCP 110
      |||:::|
Db 70 DCNNAETCTRSTNCKYKAKTCTGSTNCKYEATCTDSTGCP 108
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RESULT 12
US-09-627-650B-5
; Sequence 5, Application US/09627650B
; Patent No. 6406872
; GENERAL INFORMATION:
; APPLICANT: Bamber, Bruce
; APPLICANT: Jorgensen, Erik

```

CLASSIFICATION: 800  
ATTORNEY/AGENT INFORMATION:  
NAME: Lammert, Steven R.  
REGISTRATION NUMBER: 27653  
REFERENCE/DOCKET NUMBER: 835910-25377  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (317) 231-7258  
TELEFAX: (317) 231-7433  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 109 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: YES  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Dendroides canadensis  
US-08-569-594-4

Query Match	54.4%	Score 361;	DB 1;	Length 109;
Best Local Similarity	64.0%	Pred. No. 2.4e-25;		
Matches 64;	Conservative 12;	Mismatches 22;	Indels 2;	Caps 2;

; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
; FILE OF INVENTION: Methods Related Thereto  
; FILE REFERENCE: 21101.000903  
; CURRENT APPLICATION NUMBER: US/09/627,650B  
; CURRENT FILING DATE: 2000-07-28  
; PRIOR APPLICATION NUMBER: 09/436,063  
; PRIOR FILING DATE: 1999-11-08  
; PRIOR APPLICATION NUMBER: 60/107,727  
; PRIOR FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 50  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 5  
; LENGTH: 1917  
; TYPE: PRT  
; ORGANISM: Caenorhabditis elegans  
US-09-627-650B-5

Query Match 24.6%; Score 163.5; DB 4; Length 1917;  
Best Local Similarity 30.9%; Pred. No. 8.9e-07;  
Matches 36; Conservative 6; Mismatches 42; Indels 37; Gaps 5;  
QY 21 CLCTECYCYC-----HCTGADCTCTDACTGCGNCPNAHTCTDSKNVK----- 63  
Db 1676 CTCTCAACGTGGCTACTGGGCTACTTCTATCGGAGAGCCAGATTGAGGAGAGCAA 1735  
QY 64 -----AATCTGSKCN---TARTCTNSK-----DCFEAKTCTDSNCKYKATACTNS 106  
Db 1736 CGGAACAGTCAAAATCTCTAATTTCTGATCACACCACTCTCATCTCATTC---TATTGT 1792  
QY 107 TGC 109  
Db 1793 AGC 1795

## RESULT 13

US-09-436-063C-5  
; Sequence 5, Application US/09436063C  
; Patent No. 6407210  
; GENERAL INFORMATION:  
; APPLICANT: Bamber, Bruce  
; APPLICANT: Jorgensen, Erik

; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
; FILE OF INVENTION: Methods Related Thereto  
; FILE REFERENCE: P-1095corrected  
; CURRENT APPLICATION NUMBER: US/09/436,063C  
; CURRENT FILING DATE: 1999-11-08  
; PRIOR APPLICATION NUMBER: 60/107727  
; PRIOR FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 18  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 5  
; LENGTH: 1917  
; TYPE: PRT  
; ORGANISM: Caenorhabditis elegans  
US-09-436-063C-5

Query Match 24.6%; Score 163.5; DB 4; Length 1917;  
Best Local Similarity 30.9%; Pred. No. 8.9e-07;  
Matches 36; Conservative 6; Mismatches 42; Indels 37; Gaps 5;  
QY 21 CLCTECYCYC-----HCTGADCTCTDACTGCGNCPNAHTCTDSKNVK----- 63  
Db 1676 CTCTCAACGTGGCTACTGGGCTACTTCTATCGGAGAGCCAGATTGAGGAGAGCAA 1735  
QY 64 -----AATCTGSKCN---TARTCTNSK-----DCFEAKTCTDSNCKYKATACTNS 106  
Db 1736 CGGAACAGTCAAAATCTCTAATTTCTGATCACACCACTCTCATCTCATTC---TATTGT 1792  
QY 107 TGC 109  
Db 1793 AGC 1795

## RESULT 14

US-08-977-767-3  
; Sequence 3, Application US/08977767  
; Patent No. 5972684  
; GENERAL INFORMATION:  
; APPLICANT: Bardman, Olga  
; APPLICANT: Yue, Henry  
; APPLICANT: Greenwald, Sara  
; APPLICANT: Corley, Neil C.  
; TITLE OF INVENTION: CARBONIC ANHYDRASE VIII  
; NUMBER OF SEQUENCES: 3  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Incyte Pharmaceuticals, Inc.  
; STREET: 3174 Porter Drive  
; CITY: Palo Alto  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94304  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: Fast-Seq for Windows Version 2.0  
; CURRENT APPLICATION DATA: US/08/977,767  
; APPLICATION NUMBER:  
; FILING DATE: Herewith  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Billings, Lucy J.  
; REGISTRATION NUMBER: 36,749  
; REFERENCE/DOCKET NUMBER: PF-0423 US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 650-855-0555  
; TELEFAX: 650-845-4166  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1345 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; IMMEDIATE SOURCE:  
; LIBRARY: GenBank  
; CLONE: 1532042  
US-08-977-767-3

Query Match 24.2%; Score 160.5; DB 2; Length 1345;  
Best Local Similarity 38.3%; Pred. No. 1.2e-06;  
Matches 41; Conservative 2; Mismatches 45; Indels 19; Gaps 6;

QY 16 AVIVMCLCTECYCHCTGGADCTSC--TDACTCGCGNCPNAHTCTDSKNCKVAA---TCTGS 70  
Db 1012 AATATCACCTCCCTCCAG--CTGCATTCCCTCGCACT---TCTGAGCCAGAACTCTCCGG 1066  
QY 71 TKONTARTCTNSKDCFEAKTCTDSTNCKYKAT-----ACTNSTGCPG 111  
Db 1067 GTCCAGTCTT---CCAGAGCTCAGCCGTAACGGCGGCCCTCCAG 1110

## RESULT 15

US-09-738-884-1  
; Sequence 1, Application US/09738884  
; Patent No. 6391606  
; GENERAL INFORMATION:  
; APPLICANT: GUEGLER, Karl et al

; TITLE OF INVENTION: ISOLATED HUMAN PHOSPHOLIPASE PROTEINS,  
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN PHOSPHOLIPASE  
; TITLE OF INVENTION: PROTEINS, AND USES THEREOF  
; FILE REFERENCE: CL000849  
; CURRENT APPLICATION NUMBER: US/09/738,884



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; CURRENT FILING DATE: 2000-12-18
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PASCSEQ for Windows Version 4.0
; SEQ ID NO 1
;   LENGTH: 2211
;   TYPE: PRT
;   ORGANISM: Human
US-09-738-884-1

Query Match      24.1%   Score 160; DB 4; Length 2211;
Best Local Similarity 39.6%   Pred. No. 2.1e-06;
Matches 36; Conservative 0; Mismatches 45; Indels 10; Gaps 4;

Qy      21 CLCTECYCHCTGGADCTCTDACTGCGNCPNAHTCTDSKNCVKAATCTGSKCNTARTCT 80
Db      1138 CACTGCGGGCTGGAGCAGCAGGCTGC--CATGGCCC--GCCACCTCTGCACCATC--CT 1190

Qy      81 NSKDCFEAKTCTDSTNICYKATACTNSTGCPG 111
Db      1191 GGGGGACATGCTGGTG---ACACAGGCGCTG 1218
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Search completed: December 1, 2003, 07:30:00  
Job time : 31.4146 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 1, 2003, 07:18:41 ; Search time 3.36585 Seconds  
(without alignments)  
150.847 Million cell updates/sec

Title: US-10-032-658-1

Perfect score: 42

Sequence: 1 CTXSSXXCXXAXT 12

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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4: /cgn2\_6/prodata/1/iaa/6B\_COMB.pep.\*  
5: /cgn2\_6/prodata/1/iaa/PCUS\_COMB.pep.\*  
6: /cgn2\_6/prodata/1/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	33	78.6	148	4	US-08-882-907-15
2	32	76.2	109	1	US-08-485-359-4
3	32	76.2	109	1	US-08-569-594-4
4	32	76.2	109	5	PCT-US96-08815-4
5	32	76.2	112	4	US-08-882-907-11
6	32	76.2	112	4	US-08-882-907-13
7	31	73.8	28	1	US-08-485-359-7
8	31	73.8	28	1	US-08-569-594-7
9	31	73.8	28	5	PCT-US96-08815-7
10	31	73.8	108	1	US-08-485-359-2
11	31	73.8	108	1	US-08-569-594-2
12	31	73.8	108	5	PCT-US96-08815-2
13	31	73.8	124	4	US-08-882-907-17
14	31	73.8	124	4	US-08-882-907-19
15	30	71.4	12	4	US-08-882-907-1
16	30	71.4	126	4	US-09-252-991A-21726
17	30	71.4	2508	4	US-09-627-650B-7
18	30	71.4	2508	4	US-09-436-063C-7
19	30	71.4	2544	4	US-09-436-063C-3
20	30	71.4	2544	4	US-09-627-650B-3
21	30	71.4	2601	4	US-09-627-650B-9
22	30	71.4	2601	4	US-09-436-063C-9
23	29	69.0	341	2	US-08-209-521-11
24	29	69.0	2211	4	US-09-738-884-1
25	28	66.7	48	5	PCT-US96-01720-8
26	28	66.7	48	5	PCT-US96-01720-9
27	28	66.7	144	5	PCT-US93-07213-11

US-08-882-907-15 28 66.7 179 4 US-09-252-991A-21175 Sequence 21175, A  
; Sequence 15, Application US/08882907 Sequence 6, Appli  
; Patent No. 6392024 28 66.7 801 1 US-07-906-349A-6 Sequence 3, Appli  
; GENERAL INFORMATION: 28 66.7 1345 2 US-08-977-767-3 Sequence 37, Appli  
; APPLICANT: Graham, Laurie A. 30 28 66.7 1400 4 US-08-630-915A-37 Sequence 3, Appli  
; APPLICANT: Walker, Virginia K. 32 28 66.7 1417 4 US-08-900-230-3 Sequence 3, Appli  
; APPLICANT: Davies, Peter L. 32 28 66.7 1417 4 US-08-900-230-3 Sequence 3, Appli  
; NUMBER OF INVENTIONS: Tenebrio Antifreeze Proteins Sequence 47, Appli  
; TITLE OF INVENTION: 22 Sequence 29444, A  
; CORRESPONDENCE ADDRESS: 27 64.3 20 3 US-08-476-509B-47 Sequence 27726, A  
; ADDRESSEE: Townsend and Townsend and Crew LLP Sequence 25719, A  
; STREET: Two Embarcadero Center, Eighth Floor Sequence 17476, A  
; CITY: San Francisco Sequence 25719, A  
; STATE: California Sequence 3, Appli  
; COUNTRY: USA Sequence 1, Appli  
; ZIP: 94111-3834 Sequence 1, Appli  
; COMPUTER READABLE FORM: Sequence 1, Appli  
; MEDIUM TYPE: Floppy disk Sequence 1, Appli  
; COMPUTER: IBM PC compatible Sequence 1, Appli  
; OPERATING SYSTEM: PC-DOS/MS-DOS Sequence 1, Appli  
; SOFTWARE: Patent in Release #1.0, Version #1.30 Sequence 1, Appli  
; CURRENT APPLICATION DATA: Sequence 1, Appli  
; APPLICATION NUMBER: US/08/882,907 Sequence 1, Appli  
; FILING DATE: 26-JUN-1997 Sequence 1, Appli  
; CLASSIFICATION: 435 Sequence 1, Appli  
; ATTORNEY/AGENT INFORMATION: Sequence 1, Appli  
; NAME: Weber, Kenneth A. Sequence 1, Appli  
; REGISTRATION NUMBER: 31,677 Sequence 1, Appli  
; REFERENCE/DOCKET NUMBER: 016252-002100US Sequence 1, Appli  
; TELECOMMUNICATION INFORMATION: Sequence 1, Appli  
; TELEPHONE: (415) 576-0200 Sequence 1, Appli  
; TELEFAX: (415) 576-0300 Sequence 1, Appli  
; INFORMATION FOR SEQ ID NO: 15: Sequence 1, Appli  
; SEQUENCE CHARACTERISTICS: Sequence 1, Appli  
; LENGTH: 148 amino acids Sequence 1, Appli  
; TYPE: amino acid Sequence 1, Appli  
; TOPOLOGY: linear Sequence 1, Appli  
; MOLECULE TYPE: protein Sequence 1, Appli  
US-08-882-907-15

## ALIGNMENTS

RESULT 1  
US-08-882-907-15 179 4 US-09-252-991A-21175  
; Sequence 15, Application US/08882907  
; Patent No. 6392024  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; APPLICANT: Liou, Yih-Cherng  
; APPLICANT: Walker, Virginia K.  
; APPLICANT: Davies, Peter L.  
; NUMBER OF INVENTIONS: Tenebrio Antifreeze Proteins  
; TITLE OF INVENTION: 22  
; CORRESPONDENCE ADDRESS: 22  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/882,907  
FILING DATE: 26-JUN-1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 148 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-882-907-15

Query Match 78.6%; Score 33; DB 4; Length 148;  
Best Local Similarity 50.0%; Pred. No. 16;  
Matches 6; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 CTXSSXXCXXAXT 12

Db 115 CTGSSNCYTATT 126

```
RESULT 2
US-08-485-359-4
; Sequence 4, Application US/08485359
; Patent No. 5627051
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,359
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-25377
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-485-359-4

Query Match 76.2%; Score 32; DB 1; Length 109;
Best Local Similarity 50.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CTXSSXCXXXT 12
Db 89 CTGSTNCYEATT 100

RESULT 3
US-08-569-594-4
; Sequence 4, Application US/08569594
; Patent No. 5633451
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/08815
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-27026
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-569-594-4

Query Match 76.2%; Score 32; DB 1; Length 109;
Best Local Similarity 50.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CTXSSXCXXXT 12
Db 89 CTGSTNCYEATT 100

RESULT 4
PCT-US96-08815-4
; Sequence 4, Application PC/TUS9608815
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; DENDROIDES ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/08815
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-27026
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-569-594-4
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; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/569,594
; FILING DATE:
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-25377
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-569-594-4

Query Match 76.2%; Score 32; DB 1; Length 109;
Best Local Similarity 50.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CTXSSXCXXXT 12
Db 89 CTGSTNCYEATT 100
```

```
RESULT 4
PCT-US96-08815-4
; Sequence 4, Application PC/TUS9608815
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; DENDROIDES ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/08815
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-27026
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
; TELEFAX: (317) 231-7433
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
; US-08-569-594-4
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; ORIGINAL SOURCE:
; ORGANISM: Dendroides canadensis
PCT-US96-08815-4

Query Match      76.2%; Score 32; DB 5; Length 109;
Best Local Similarity 50.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy      1 CTXSSXXCXXAXT 12
      ||| ||| |||
Db      89 CTGSTNCEYAT 100

RESULT 5
US-08-882-907-11
; Sequence 11, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-882-907-13

Query Match      76.2%; Score 32; DB 4; Length 112;
Best Local Similarity 50.0%; Pred. No. 19;
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy      1 CTXSSXXCXXAXT 12
      ||| ||| |||
Db      67 CTGSTDCNTAQ 78

RESULT 7
US-08-485-359-7
; Sequence 7, Application US/08485359
; Patent No. 5827051
; GENERAL INFORMATION:
; APPLICANT: Duman, John G.
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING
; TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Barnes & Thornburg
; STREET: 11 South Meridian
; CITY: Indianapolis
; STATE: Indiana
; COUNTRY: USA
; ZIP: 46204
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,359
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Lammert, Steven R.
; REGISTRATION NUMBER: 27653
; REFERENCE/DOCKET NUMBER: 835910-25377
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (317) 231-7258
```

TELEFAX: (317) 231-7433  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 28 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; FRAGMENT TYPE: internal  
; ORIGINAL SOURCE:  
; ORGANISM: Dendroides canadensis  
; US-08-485-359-7

Query Match 73.8%; Score 31; DB 1; Length 28;  
Best Local Similarity 50.0%; Pred. No. 9.4;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSCXXCXXAT 12  
DB 12 CTRSTNCYKAVT 23

RESULT 8  
US-08-569-594-7  
; Sequence 7, Application US/08569594  
; Patent No. 5633451  
; GENERAL INFORMATION:  
; APPLICANT: Duman, John G.  
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
; REFERENCE/DOCKET NUMBER: 27653  
; NUMBER OF SEQUENCES: 9  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Barnes & Thornburg  
; STREET: 11 South Meridian  
; CITY: Indianapolis  
; STATE: Indiana  
; COUNTRY: USA  
; ZIP: 46204  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/569,594  
; FILING DATE:  
; CLASSIFICATION: 800  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Lammert, Steven R.  
; REGISTRATION NUMBER: 27653  
; REFERENCE/DOCKET NUMBER: 835910-25377  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (317) 231-7433  
; TELEFAX: (317) 231-7433  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 28 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; FRAGMENT TYPE: internal  
; ORIGINAL SOURCE:  
; ORGANISM: Dendroides canadensis  
; US-08-569-594-7

Query Match 73.8%; Score 31; DB 1; Length 28;  
Best Local Similarity 50.0%; Pred. No. 9.4;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSCXXCXXAT 12  
DB 12 CTRSTNCYKAVT 23

DB 12 CTRSTNCYKAVT 23

RESULT 9  
PCT-US96-08815-7  
; Sequence 7, Application PC/TUS9608815  
; GENERAL INFORMATION:  
; APPLICANT: Duman, John G.  
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
; REFERENCE/DOCKET NUMBER: 27653  
; NUMBER OF SEQUENCES: 9  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Barnes & Thornburg  
; STREET: 11 South Meridian  
; CITY: Indianapolis  
; STATE: Indiana  
; COUNTRY: USA  
; ZIP: 46204  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US96/08815  
; FILING DATE:  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Lammert, Steven R.  
; REGISTRATION NUMBER: 27653  
; REFERENCE/DOCKET NUMBER: 835910-27026  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (317) 231-7433  
; TELEFAX: (317) 231-7433  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 28 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; FRAGMENT TYPE: internal  
; ORIGINAL SOURCE:  
; ORGANISM: Dendroides canadensis  
; PCT-US96-08815-7

Query Match 73.8%; Score 31; DB 5; Length 28;  
Best Local Similarity 50.0%; Pred. No. 9.4;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSCXXCXXAT 12  
DB 12 CTRSTNCYKAVT 23

RESULT 10  
US-08-485-359-2  
; Sequence 2, Application US/08485359  
; Patent No. 5627051  
; GENERAL INFORMATION:  
; APPLICANT: Duman, John G.  
; TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
; REFERENCE/DOCKET NUMBER: 27653  
; NUMBER OF SEQUENCES: 9  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Barnes & Thornburg  
; STREET: 11 South Meridian  
; CITY: Indianapolis  
; STATE: Indiana  
; COUNTRY: USA  
; ZIP: 46204

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,359  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Lammert, Steven R.  
REGISTRATION NUMBER: 27653  
REFERENCE/DOCKET NUMBER: 835910-25377  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (317) 231-7258  
TELEFAX: (317) 231-7433  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 108 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: YES  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Dendroides canadensis  
US-08-485-359-2

Query Match 73.8%; Score 31; DB 1; Length 108;  
Best Local Similarity 50.0%; Pred. No. 28;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSSXXCXXXT 12  
DB 53 CTRSSNCINALT 64

RESULT 11  
US-08-569-594-2  
Sequence 2, Application US/08569594  
Patent No. 5633451  
GENERAL INFORMATION:  
APPLICANT: Duman, John G.  
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
TITLE OF INVENTION: DENDROIDES CANADENSIS ANTIFREEZE PROTEINS  
NUMBER OF SEQUENCES: 9  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Barnes & Thornburg  
STREET: 11 South Meridian  
CITY: Indianapolis  
STATE: Indiana  
COUNTRY: USA  
ZIP: 46204  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/569,594  
FILING DATE:  
CLASSIFICATION: 800  
ATTORNEY/AGENT INFORMATION:  
NAME: Lammert, Steven R.  
REGISTRATION NUMBER: 27653  
REFERENCE/DOCKET NUMBER: 835910-25377  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (317) 231-7258  
TELEFAX: (317) 231-7433  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 108 amino acids  
TYPE: amino acid

TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: YES  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Dendroides canadensis  
US-08-569-594-2

Query Match 73.8%; Score 31; DB 1; Length 108;  
Best Local Similarity 50.0%; Pred. No. 28;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSSXXCXXXT 12  
DB 53 CTRSSNCINALT 64

RESULT 12  
PCT-US96-08815-2  
Sequence 2, Application PC/TUS9608815  
GENERAL INFORMATION:  
APPLICANT: Duman, John G.  
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING  
TITLE OF INVENTION: DENDROIDES ANTIFREEZE PROTEINS  
NUMBER OF SEQUENCES: 9  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Barnes & Thornburg  
STREET: 11 South Meridian  
CITY: Indianapolis  
STATE: Indiana  
COUNTRY: USA  
ZIP: 46204  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US96/08815  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Lammert, Steven R.  
REGISTRATION NUMBER: 27653  
REFERENCE/DOCKET NUMBER: 835910-27026  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (317) 231-7258  
TELEFAX: (317) 231-7433  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 108 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: YES  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Dendroides canadensis  
PCT-US96-08815-2

Query Match 73.8%; Score 31; DB 5; Length 108;  
Best Local Similarity 50.0%; Pred. No. 28;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSSXXCXXXT 12  
DB 53 CTRSSNCINALT 64

RESULT 13  
US-08-882-907-17  
Sequence 17, Application US/08882907  
Patent No. 6392024

GENERAL INFORMATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 124 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-882-907-19

Query Match 73.8%; Score 31; DB 4; Length 124;  
Best Local Similarity 50.0%; Pred. No. 32;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTX5XXCXXAT 12  
DB 79 CTGSRNCNTAMT 90

RESULT 14  
US-08-882-907-19  
Sequence 19, Application US/08882907  
Patent No. 6392024  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
APPLICANT: Liou, Yih-Cherng  
APPLICANT: Walker, Virginia K.  
APPLICANT: Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/882,907  
FILING DATE: 26-JUN-1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 124 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-882-907-17

Query Match 73.8%; Score 31; DB 4; Length 124;  
Best Local Similarity 50.0%; Pred. No. 32;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTX5XXCXXAT 12  
DB 79 CTGSRNCNTAMT 90

RESULT 14  
US-08-882-907-19  
Sequence 19, Application US/08882907  
Patent No. 6392024  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
APPLICANT: Liou, Yih-Cherng  
APPLICANT: Walker, Virginia K.  
APPLICANT: Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/882,907  
FILING DATE: 26-JUN-1997

CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 124 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-882-907-19

Query Match 73.8%; Score 31; DB 4; Length 124;  
Best Local Similarity 50.0%; Pred. No. 32;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTX5XXCXXAT 12  
DB 79 CTGSRNCNTAMT 90

RESULT 15  
US-08-882-907-1  
Sequence 1, Application US/08882907  
Patent No. 6392024  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
APPLICANT: Liou, Yih-Cherng  
APPLICANT: Walker, Virginia K.  
APPLICANT: Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/882,907  
FILING DATE: 26-JUN-1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..12  
OTHER INFORMATION: /note="consensus 12 amino acid repeating motif"  
US-08-882-907-1

Query Match 71.4%; Score 30; DB 4; Length 12;  
Best Local Similarity 100.0%; Pred.No. 7.1;  
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| | | | | | | | | |  
Db 1 CTXXXCXXXT 12

Search completed: December 1, 2003, 07:29:59  
Job time : 4.36585 secs



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: December 1, 2003, 07:18:41 ; Search time 4.4878 Seconds  
(without alignments)  
150.847 Million cell updates/sec

Title: US-10-032-658-3

Perfect score: 64

Sequence: 1 XCTXXXCTXCTXXCT 16

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:\*  
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6: /cgn2\_6/prodata/1/iaa/backfiles1.pcp.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

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2	53	82.8	124	4	US-08-882-907-17
3	53	82.8	124	4	US-08-882-907-19
4	52	81.2	124	4	US-08-882-907-4
5	52	81.2	112	4	US-08-882-907-11
6	52	81.2	112	4	US-08-882-907-13
7	49	76.6	16	4	US-08-882-907-3
8	48	75.0	45	4	US-08-900-230-14
9	47	73.4	50	4	US-08-900-230-58
10	47	73.4	1128	4	US-09-627-650B-11
11	47	73.4	1128	4	US-09-436-063C-11
12	47	73.4	1552	4	US-09-627-650B-1
13	47	73.4	1652	4	US-09-436-063C-1
14	47	73.4	2508	4	US-09-627-650B-7
15	47	73.4	2508	4	US-09-436-063C-7
16	47	73.4	2544	4	US-09-627-650B-3
17	47	73.4	2544	4	US-09-436-063C-3
18	47	73.4	2601	4	US-09-627-650B-9
19	47	73.4	2601	4	US-09-436-063C-9
20	46	71.9	24	1	US-08-036-555B-41
21	46	71.9	24	1	US-08-469-569-41
22	46	71.9	24	1	US-08-249-322A-41
23	46	71.9	24	1	US-08-469-526A-41
24	46	71.9	24	2	US-08-734-591A-41
25	46	71.9	24	2	US-08-469-660-41
26	46	71.9	24	3	US-08-735-021-41
27	46	71.9	24	3	US-08-734-664A-41

28 46 71.9 24 5 PCT-US94-05083C-41 Sequence 41, Appl  
29 46 71.9 24 5 PCT-US95-06846A-41 Sequence 41, Appl  
30 46 71.9 108 1 US-08-485-359-2 Sequence 2, Appl  
31 46 71.9 108 1 US-08-569-594-2 Sequence 2, Appl  
32 46 71.9 108 5 PCT-US96-08815-2 Sequence 2, Appl  
33 46 71.9 109 1 US-08-485-359-4 Sequence 4, Appl  
34 46 71.9 109 1 US-08-569-594-4 Sequence 4, Appl  
35 46 71.9 109 5 PCT-US96-08815-4 Sequence 3, Appl  
36 45 70.3 1345 2 US-08-977-767-3 Sequence 3, Appl  
37 43 67.2 2088 4 US-08-900-230-3 Sequence 3, Appl  
38 43 67.2 2088 4 US-09-548-372D-13 Sequence 13, Appl  
39 43 67.2 2088 4 US-09-548-367D-13 Sequence 13, Appl  
40 43 67.2 2088 4 US-09-551-853D-13 Sequence 13, Appl  
41 41.5 64.8 2211 4 US-09-738-884-1 Sequence 1, Appl  
42 41 64.1 1400 4 US-08-630-915A-37 Sequence 37, Appl  
43 41 64.1 1917 4 US-09-627-650B-5 Sequence 5, Appl  
44 41 64.1 1917 4 US-09-436-063C-5 Sequence 5, Appl  
45 40 62.5 45 4 US-08-900-230-10 Sequence 10, Appl

#### ALIGNMENTS

RESULT 1  
US-08-882-907-15  
; Sequence 15, Application US/08882907  
; Patent No. 6392024  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; APPLICANT: Liou, Yih-Cherng  
; APPLICANT: Walker, Virginia K.  
; APPLICANT: Davies, Peter L.  
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA: US/08/882,907  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 15:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 148 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-882-907-15

Query Match 84.4%; Score 54; DB 4; Length 148;  
Best Local Similarity 53.3%; Pred. No. 0.78;  
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXCTXXCT 16  
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DB 30 CTGAADCTCTACT 44

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; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-882-907-19
;
Query Match 82.8%; Score 53; DB 4; Length 124;
Best Local Similarity 53.3%; Pred. No. 0.92;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16
DB 30 CTGGADCTCTAACT 44

RESULT 4
US-08-882-907-4
; Sequence 4, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-882-907-17
;
Query Match 82.8%; Score 53; DB 4; Length 124;
Best Local Similarity 53.3%; Pred. No. 0.92;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16
DB 30 CTGGADCTCTAACT 44

RESULT 3
US-08-882-907-19
; Sequence 19, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-882-907-19
;
Query Match 82.8%; Score 53; DB 4; Length 124;
Best Local Similarity 53.3%; Pred. No. 0.92;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16
DB 30 CTGGADCTCTAACT 44

RESULT 4
US-08-882-907-4
; Sequence 4, Application US/08882907
; Patent No. 6392024
; GENERAL INFORMATION:
; APPLICANT: Graham, Laurie A.
; APPLICANT: Liou, Yih-Cherng
; APPLICANT: Walker, Virginia K.
; APPLICANT: Davies, Peter L.
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,907
; FILING DATE: 26-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-002100US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Peptide

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NAME/KEY: Modified-site  
LOCATION: 1  
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OTHER INFORMATION: /note= "Xaa = Gln or His"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 5  
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LOCATION: 13  
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OTHER INFORMATION: /note= "Xaa = Ala, Asp or Gly"  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 20  
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US-08-882-907-4  
Query Match 81.2%; Score 52; DB 4; Length 24;  
Best Local Similarity 66.7%; Pred. No. 0.38;  
Matches 10; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
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DB 2 CTGXADCTCTXACT 16  
RESULT 5  
US-08-882-907-11  
; Sequence 11, Application US/08882907  
; Patent No. 6392024  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; APPLICANT: Liou, Yih-Cherng  
; APPLICANT: Walker, Virginia K.  
; APPLICANT: Davies, Peter L.  
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0300  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 112 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear

MOLECULE TYPE: protein  
US-08-882-907-11  
Query Match 81.2%; Score 52; DB 4; Length 112;  
Best Local Similarity 53.3%; Pred. No. 1.1;  
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
QY 2 CTXXXXCTCTXXCT 16  
DB 30 CTGGADCTCTGACT 44  
RESULT 6  
US-08-882-907-13  
; Sequence 13, Application US/08882907  
; Patent No. 6392024  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; APPLICANT: Liou, Yih-Cherng  
; APPLICANT: Walker, Virginia K.  
; APPLICANT: Davies, Peter L.  
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 112 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-882-907-13  
Query Match 81.2%; Score 52; DB 4; Length 112;  
Best Local Similarity 53.3%; Pred. No. 1.1;  
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
QY 2 CTXXXXCTCTXXCT 16  
DB 30 CTGGADCTCTGACT 44  
RESULT 7  
US-08-882-907-3  
; Sequence 3, Application US/08882907  
; Patent No. 6392024  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; APPLICANT: Liou, Yih-Cherng  
; APPLICANT: Walker, Virginia K.  
; APPLICANT: Davies, Peter L.  
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins

; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM: disk  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 amino acids  
; TYPE: amino acid  
; STRANDEDNESS:  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; FEATURE:  
; NAME/KEY: Peptide  
; LOCATION: 1..16  
; OTHER INFORMATION: /note= "consensus 16 amino acid  
; OTHER INFORMATION: N-terminal motif for YL-1, YL-2, YL-3  
; OTHER INFORMATION: and YL-4"  
; US-08-882-907-3

Query Match 76.6%; Score 49; DB 4; Length 16;  
Best Local Similarity 100.0%; Pred. No. 0.68;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 2 CTXXXXCTCTXXCT 16

RESULT 8  
US-08-900-230-14  
; Sequence 14, Application US/08900230  
; Patent No. 6329197  
; GENERAL INFORMATION:  
; APPLICANT: Bard, Jonathan A.  
; TITLE OF INVENTION: DNA ENCODING GALANN GALR3 RECEPTORS AND  
; TITLE OF INVENTION: USES THEREOF  
; NUMBER OF SEQUENCES: 59  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Cooper & Dunham LLP  
; STREET: 1185 Avenue of The Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 11036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/900,230  
; FILING DATE: 23-JUL-1997  
; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:  
; NAME: White, John P.  
; REGISTRATION NUMBER: 28,678  
; REFERENCE/DOCKET NUMBER: 52241-C/JPW/ADM  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 212-278-0400  
; TELEFAX: 212-391-0525  
; INFORMATION FOR SEQ ID NO: 14:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 45 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE:  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; US-08-900-230-14

Query Match 75.0%; Score 48; DB 4; Length 45;  
Best Local Similarity 46.7%; Pred. No. 1.9;  
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 2 CTXXXXCTCTXXCT 16  
Db 25 CTTAGCTACCTGCT 39

RESULT 9  
US-08-900-230-58  
; Sequence 58, Application US/08900230  
; Patent No. 6329197  
; GENERAL INFORMATION:  
; APPLICANT: Bard, Jonathan A.  
; TITLE OF INVENTION: DNA ENCODING GALANN GALR3 RECEPTORS AND  
; TITLE OF INVENTION: USES THEREOF  
; NUMBER OF SEQUENCES: 59  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Cooper & Dunham LLP  
; STREET: 1185 Avenue of The Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 11036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/900,230  
; FILING DATE: 23-JUL-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: White, John P.  
; REGISTRATION NUMBER: 28,678  
; REFERENCE/DOCKET NUMBER: 52241-C/JPW/ADM  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 212-278-0400  
; TELEFAX: 212-391-0525  
; INFORMATION FOR SEQ ID NO: 58:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 50 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE:  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; US-08-900-230-58

OY

Db

Query Match 73.4%; Score 47; DB 4; Length 50;  
Best Local Similarity 46.7%; Pred. No. 2.7;  
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTXXXXCTXXCT 16  
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 Db 9 CTAATAGACTACT 23

## RESULT 10

US-09-627-650B-11  
 ; Sequence 11, Application US/09627650B  
 ; Patent No. 6406872  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Jorgensen, Erik  
 ; APPLICANT: Bamber, Bruce  
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
 ; FILE OF INVENTION: Methods Related Thereto  
 ; FILE REFERENCE: 21101.0009U3  
 ; CURRENT APPLICATION NUMBER: US/09/627,650B  
 ; CURRENT FILING DATE: 2000-07-28  
 ; PRIOR APPLICATION NUMBER: 09/436,063  
 ; PRIOR FILING DATE: 1999-11-08  
 ; PRIOR APPLICATION NUMBER: 60/107,727  
 ; PRIOR FILING DATE: 1998-11-09  
 ; NUMBER OF SEQ ID NOS: 50  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 11  
 ; LENGTH: 1128  
 ; TYPE: PRT  
 ; ORGANISM: Caenorhabditis elegans  
 US-09-627-650B-11

Query Match 73.4%; Score 47; DB 4; Length 1128;  
 Best Local Similarity 46.7%; Pred. No. 25;  
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTXXXXCTXXCT 16  
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 Db 575 CGTTTCTGCTATCT 589

## RESULT 11

US-09-436-063C-11  
 ; Sequence 11, Application US/09436063C  
 ; Patent No. 6407210  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Jorgensen, Erik  
 ; APPLICANT: Bamber, Bruce  
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
 ; FILE OF INVENTION: Methods Related Thereto  
 ; FILE REFERENCE: P-1095corrected  
 ; CURRENT APPLICATION NUMBER: US/09/436,063C  
 ; CURRENT FILING DATE: 1999-11-08  
 ; PRIOR APPLICATION NUMBER: 60/107727  
 ; PRIOR FILING DATE: 1998-11-09  
 ; NUMBER OF SEQ ID NOS: 18  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 11  
 ; LENGTH: 1128  
 ; TYPE: PRT  
 ; ORGANISM: Caenorhabditis elegans  
 US-09-436-063C-11

Query Match 73.4%; Score 47; DB 4; Length 1128;  
 Best Local Similarity 46.7%; Pred. No. 25;  
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTXXXXCTXXCT 16  
 ||| ||| |||  
 Db 575 CGTTTCTGCTATCT 589

## RESULT 12

US-09-627-650B-1  
 ; Sequence 1, Application US/09627650B

; Patent No. 6406872  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bamber, Bruce  
 ; APPLICANT: Jorgensen, Erik  
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
 ; FILE OF INVENTION: Methods Related Thereto  
 ; FILE REFERENCE: 21101.0009U3  
 ; CURRENT APPLICATION NUMBER: US/09/627,650B  
 ; CURRENT FILING DATE: 2000-07-28  
 ; PRIOR APPLICATION NUMBER: 09/436,063  
 ; PRIOR FILING DATE: 1999-11-08  
 ; PRIOR APPLICATION NUMBER: 60/107,727  
 ; PRIOR FILING DATE: 1998-11-09  
 ; NUMBER OF SEQ ID NOS: 50  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 1  
 ; LENGTH: 1652  
 ; TYPE: PRT  
 ; ORGANISM: Caenorhabditis elegans  
 US-09-627-650B-1

Query Match 73.4%; Score 47; DB 4; Length 1652;  
 Best Local Similarity 46.7%; Pred. No. 32;  
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTXXXXCTXXCT 16  
 ||| ||| |||  
 Db 1076 CGTTTCTGCTATCT 1090

## RESULT 13

US-09-436-063C-1  
 ; Sequence 1, Application US/09436063C  
 ; Patent No. 6407210  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bamber, Bruce  
 ; APPLICANT: Jorgensen, Erik  
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
 ; FILE OF INVENTION: Methods Related Thereto  
 ; FILE REFERENCE: P-1095corrected  
 ; CURRENT APPLICATION NUMBER: US/09/436,063C  
 ; CURRENT FILING DATE: 1999-11-08  
 ; PRIOR APPLICATION NUMBER: 60/107727  
 ; PRIOR FILING DATE: 1998-11-09  
 ; NUMBER OF SEQ ID NOS: 18  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 1  
 ; LENGTH: 1652  
 ; TYPE: PRT  
 ; ORGANISM: Caenorhabditis elegans  
 US-09-436-063C-1

Query Match 73.4%; Score 47; DB 4; Length 1652;  
 Best Local Similarity 46.7%; Pred. No. 32;  
 Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTXXXXCTXXCT 16  
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 Db 1076 CGTTTCTGCTATCT 1090

## RESULT 14

US-09-627-650B-7  
 ; Sequence 7, Application US/09627650B  
 ; Patent No. 6406872  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bamber, Bruce  
 ; APPLICANT: Jorgensen, Erik  
 ; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
 ; FILE OF INVENTION: Methods Related Thereto  
 ; FILE REFERENCE: 21101.0009U3  
 ; CURRENT APPLICATION NUMBER: US/09/627,650B  
 ; CURRENT FILING DATE: 2000-07-28

; PRIOR APPLICATION NUMBER: 09/436,063  
; PRIOR FILING DATE: 1999-11-08  
; PRIOR APPLICATION NUMBER: 60/107,727  
; PRIOR FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 50  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 7  
; LENGTH: 2508  
; TYPE: PRT  
; ORGANISM: Caenorhabditis elegans  
US-09-627-650B-7

Query Match 73.4%; Score 47; DB 4; Length 2508;  
Best Local Similarity 46.7%; Pred. No. 43;  
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTXXXXCTCTXXCT 16

Db 1960 CGGTTTCTGCTATCT 1974

# RESULT 15

US-09-436-063C-7  
; Sequence 7, Application US/09436063C  
; Patent No. 6407210  
; GENERAL INFORMATION:  
; APPLICANT: Bamber, Bruce  
; TITLE OF INVENTION: Nematode Neuromuscular Junction GABA Receptors and  
; FILE REFERENCE: P-10950corrected  
; CURRENT APPLICATION NUMBER: US/09/436,063C  
; CURRENT FILING DATE: 1999-11-08  
; PRIOR APPLICATION NUMBER: 60/107727  
; PRIOR FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 18  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 7  
; LENGTH: 2508  
; TYPE: PRT  
; ORGANISM: Caenorhabditis elegans  
US-09-436-063C-7

Query Match 73.4%; Score 47; DB 4; Length 2508;  
Best Local Similarity 46.7%; Pred. No. 43;  
Matches 7; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 2 CTXXXXCTCTXXCT 16

Db 1960 CGGTTTCTGCTATCT 1974

Search completed: December 1, 2003, 07:30:00  
Job time : 5.4876 secs

GenCore version 5.1.6  
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## OM protein - protein search, using sw model

Run on: December 1, 2003, 07:18:41 ; Search time 371.512 Seconds  
(without alignments)  
55.604 Million cell updates/sec

Title: US-10-032-658-11

Perfect score: 664

Sequence: 1 MAFKTCGRSKVLVIAIVM.....DSTNCVKATACINSGTCFCH 112

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 673684 seqs, 184443283 residues

Total number of hits satisfying chosen parameters: 673684

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications\_AA.\*

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3: /cgn2\_6/prodata/1/pubpaa/US06\_NEW\_PUB.pep.\*  
4: /cgn2\_6/prodata/1/pubpaa/US06\_PUBCOMB.pep.\*  
5: /cgn2\_6/prodata/1/pubpaa/US07\_NEW\_PUB.pep.\*  
6: /cgn2\_6/prodata/1/pubpaa/US07\_PUBCOMB.pep.\*  
7: /cgn2\_6/prodata/1/pubpaa/US08\_NEW\_PUB.pep.\*  
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10: /cgn2\_6/prodata/1/pubpaa/US09B\_PUBCOMB.pep.\*  
11: /cgn2\_6/prodata/1/pubpaa/US09C\_PUBCOMB.pep.\*  
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13: /cgn2\_6/prodata/1/pubpaa/US10A\_PUBCOMB.pep.\*  
14: /cgn2\_6/prodata/1/pubpaa/US10B\_PUBCOMB.pep.\*  
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17: /cgn2\_6/prodata/1/pubpaa/US60\_NEW\_PUB.pep.\*  
18: /cgn2\_6/prodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	664	100.0	112	14	US-10-032-658-11
2	603	90.8	124	14	US-10-032-658-17
3	599	90.2	112	14	US-10-032-658-13
4	599	90.2	112	14	US-10-032-658-19
5	487	73.3	148	14	US-10-032-658-15
6	184	27.7	2164	12	US-10-140-472-151
7	184	27.7	2164	12	US-10-141-761-151
8	184	27.7	2164	12	US-10-142-885-151
9	184	27.7	2164	12	US-10-158-790-151
10	184	27.7	2164	12	US-10-137-871-151
11	184	27.7	2164	12	US-10-140-805-151
12	184	27.7	2164	12	US-10-140-864-151
13	184	27.7	2164	12	US-10-140-923-151
14	184	27.7	2164	12	US-10-141-756-151
15	184	27.7	2164	12	US-10-141-759-151

16 184 27.7 2164 15 US-10-123-155-151  
17 184 27.7 2164 16 US-10-146-731-151  
18 182.5 27.5 2380 12 US-10-063-685-161  
19 182.5 27.5 2380 15 US-10-184-644-597  
20 182.5 27.5 2380 15 US-10-184-634-597  
21 180 27.1 756 12 US-10-140-472-171  
22 180 27.1 756 12 US-10-141-761-171  
23 180 27.1 756 12 US-10-142-885-171  
24 180 27.1 756 12 US-10-158-790-171  
25 180 27.1 756 12 US-10-137-871-171  
26 180 27.1 756 12 US-10-140-805-171  
27 180 27.1 756 12 US-10-140-864-171  
28 180 27.1 756 12 US-10-140-923-171  
29 180 27.1 756 12 US-10-141-756-171  
30 180 27.1 756 12 US-10-141-759-171  
31 180 27.1 756 15 US-10-123-155-171  
32 180 27.1 756 16 US-10-146-731-171  
33 178.5 26.9 3819 12 US-10-140-472-405  
34 178.5 26.9 3819 12 US-10-141-761-405  
35 178.5 26.9 3819 12 US-10-142-885-405  
36 178.5 26.9 3819 12 US-10-158-790-405  
37 178.5 26.9 3819 12 US-10-137-871-405  
38 178.5 26.9 3819 12 US-10-140-805-405  
39 178.5 26.9 3819 12 US-10-140-864-405  
40 178.5 26.9 3819 12 US-10-140-923-405  
41 178.5 26.9 3819 12 US-10-141-756-405  
42 178.5 26.9 3819 12 US-10-141-759-405  
43 178.5 26.9 3819 15 US-10-123-155-405  
44 178.5 26.9 3819 16 US-10-146-731-405  
45 177 26.7 2690 15 US-10-184-644-35

## ALIGNMENTS

## RESULT 1

US-10-032-658-11  
; Sequence 11, Application US/10032658  
; Publication No. US20020165383A1

## GENERAL INFORMATION:

APPLICANT: Graham, Laurie A.  
Liou, Yih-Cherng  
Walker, Virginia K.  
Davies, Peter L.

TITLE OF INVENTION: Tenebrio Antifreeze Proteins

NUMBER OF SEQUENCES: 22

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/032.658

FILING DATE: 02-Jan-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/982.907

FILING DATE: 26-JUN-1997

ATTORNEY/AGENT INFORMATION:

NAME: Weber, Kenneth A.

REGISTRATION NUMBER: 31,677

REFERENCE/DOCKET NUMBER: 016252-002100US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 11:

SEQUENCE CHARACTERISTICS:  
LENGTH: 112 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 11:  
US-10-032-658-11

Query Match 100.0%; Score 664; DB 14; Length 112;  
Best Local Similarity 100.0%; Pred. No. 2.5e-53;  
Matches 112; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAFKTCGFSKKWLVIIVIVMCLCTEYCHCTGGADCTCTDSTNCKYKATACTNSTDGSKN 60  
DB 1 MAFKTCGFSKKWLVIIVIVMCLCTEYCHCTGGADCTCTDSTNCKYKATACTNSTDGSKN 60  
QY 61 CVRAATCTGSKNTARTCTNSKDCFEAKTCTDSTNCKYKATACTNSTDGCPGH 112  
DB 61 CVRAATCTGSKNTARTCTNSKDCFEAKTCTDSTNCKYKATACTNSTDGCPGH 112

RESULT 2  
US-10-032-658-17  
; Sequence 17, Application US/10032658  
; Publication No. US20020165383A1  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; Liou, Yih-Cherng  
; Walker, Virginia K.  
; Davies, Peter L.  
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/032,658  
; FILING DATE: 02-Jan-2002  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 17:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 124 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; SEQUENCE DESCRIPTION: SEQ ID NO: 17:  
US-10-032-658-17

Query Match 90.8%; Score 603; DB 14; Length 124;  
Best Local Similarity 83.9%; Pred. No. 9.7e-48;  
Matches 104; Conservative 2; Mismatches 6; Indels 12; Gaps 1;

QY 1 MAFKTCGFSKKWLVIIVIVMCLCTEYCHCTGGADCTCTDSTNCKYKATACTNSTDGSKN 59

Db 1 MAFKTCGFSKKWLVIIVIVMCLCTEYCHCTGGADCTCTDSTNCKYKATACTNSTDGSKN 60  
QY 60 -----NCVKAATCTGSKNTARTCTNSKDCFEAKTCTDSTNCKYKATACTNSTDG 108  
DB 61 CVRAATCTDSENCVKAHTCTGSRNCTAMTCTNSKDCFEAKTCTDSTNCKYKATACTNSTDG 120  
QY 109 CPGH 112  
DB 121 CPGH 124

RESULT 3  
US-10-032-658-13  
; Sequence 13, Application US/10032658  
; Publication No. US20020165383A1  
; GENERAL INFORMATION:  
; APPLICANT: Graham, Laurie A.  
; Liou, Yih-Cherng  
; Walker, Virginia K.  
; Davies, Peter L.  
; TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
; NUMBER OF SEQUENCES: 22  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/032,658  
; FILING DATE: 02-Jan-2002  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,907  
; FILING DATE: 26-JUN-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 112 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:  
US-10-032-658-13

Query Match 90.2%; Score 599; DB 14; Length 112;  
Best Local Similarity 90.2%; Pred. No. 2e-47;  
Matches 101; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAFKTCGFSKKWLVIIVIVMCLCTEYCHCTGGADCTCTDSTNCKYKATACTNSTDGSKN 60  
DB 1 MAFKTCGFSKKWLVIIVIVMCLCTEYCHCTGGADCTCTDSTNCKYKATACTNSTDGSKN 60  
QY 61 CVKAATCTGSKNTARTCTNSKDCFEAKTCTDSTNCKYKATACTNSTDGCPGH 112  
DB 61 CVKANTCTGSDCTDCTAQTCTNSKDCFEAKTCTDSTNCKYKATACTNSTDGCPGH 112

RESULT 4  
US-10-032-658-19  
; Sequence 19, Application US/10032658



Publication No. US20020165383A1  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
Liou, Yih-Cherng  
Walker, Virginia K.  
Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/032.658  
FILING DATE: 02-Jan-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/882.907  
FILING DATE: 26-JUN-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0300  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 124 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 19:  
US-10-032-658-19

Query Match 90.2%; Score 599; DB 14; Length 124;  
Best Local Similarity 83.1%; Pred. No. 2.2e-47;  
Matches 103; Conservative 3; Mismatches 6; Indels 12; Gaps 1;  
Qy 1 MAFKTCGFSKKWLVIIVMCLCTECYCHCTGGADCTCTDACTGCGNCPNAH----- 53  
Db 1 MAFKTCGFSKKWLVIIVMCLCTECYCHCTGGADCTCTDACTGCGNCPNAH----- 60  
Qy 54 -----TCTDSKNCVKAACTCTGSKNCNTARTCTNSKDCFEAKTCTDSTNCKYKATACTNSTG 108  
Db 61 CVRAETCTDSKNCVKAACTCTGSKNCNTARTCTNSKDCFEAKTCTDSTNCKYKATACTNSTG 120  
Qy 109 CPGH 112  
Db 121 CPGH 124

RESULT 5  
US-10-032-658-15  
Sequence 15, Application US/10032658  
Publication No. US20020165383A1  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
Liou, Yih-Cherng  
Walker, Virginia K.  
Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/032.658  
FILING DATE: 02-Jan-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/882.907  
FILING DATE: 26-JUN-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0300  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 148 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 15:  
US-10-032-658-15

Query Match 73.3%; Score 487; DB 14; Length 148;  
Best Local Similarity 60.8%; Pred. No. 3.9e-37;  
Matches 90; Conservative 5; Mismatches 17; Indels 36; Gaps 2;  
Qy 1 MAFKTCGFSKKWLVIIVMCLCTECYCHCTGGADCTCTDACTGCGNCPNAHCTDSKN 60  
Db 1 MSFKISTFTKIWLIIIVMCLCNEYNQCCTGAADCTCTAACTGCGNCPNAITCTGSKN 60  
Qy 61 CVKAACTCTGSKN-----TARTCTNSKDCFE----- 87  
Db 61 CVRAETCTGSKNCNTARTCTNSKDCFEATCTGTHCHRAATTCTNSKDCFEATCTTGSSN 120  
Qy 88 ---AKTCTDSTNCKYKATACTNSTGCPGH 112  
Db 121 CVTATTCTNSTNCKYKATACTNSTGCPGH 148

RESULT 6  
US-10-140-472-151  
Sequence 151, Application US/10140472  
Publication No. US2003013888A1  
GENERAL INFORMATION:  
APPLICANT: Baker, Kevin P.  
APPLICANT: Bersini, Maureen  
APPLICANT: DeForge, Laura  
APPLICANT: Desnoyers, Luc  
APPLICANT: Filvaroff, Ellen  
APPLICANT: Gao, Wei-Qiang  
APPLICANT: Gerritsen, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Gurney, Austin L.  
APPLICANT: Sherwood, Steven  
APPLICANT: Smith, Victoria  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tamas, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Wood, William  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

```
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C168
; CURRENT APPLICATION NUMBER: US/10/140,472
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-472-151

Query Match      27.7%; Score 184; DB 12; Length 2164;
Best Local Similarity 38.0%; Pred. No. 1.4e-08;
Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTECYCHCTGGADCTCTDACTGCGNCPNAHTCT-----DSKNVCVKAATCTGST 71
DB 749 CCCAACCCACTGGAGCTCCA-ACTGCACAGAGTCCCGACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATCTNSTGCPG 111
DB 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 7
US-10-141-761-151
; Sequence 151, Application US/10141761
; Publication No. US20030148432A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Smith, Victoria
; APPLICANT: Sherwood, Steven
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C198
; CURRENT APPLICATION NUMBER: US/10/141,761
; CURRENT FILING DATE: 2002-05-08
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-141-761-151

Query Match      27.7%; Score 184; DB 12; Length 2164;
Best Local Similarity 38.0%; Pred. No. 1.4e-08;
Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTECYCHCTGGADCTCTDACTGCGNCPNAHTCT-----DSKNVCVKAATCTGST 71
DB 749 CCCAACCCACTGGAGCTCCA-ACTGCACAGAGTCCCGACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATCTNSTGCPG 111
DB 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 8
US-10-142-885-151
; Sequence 151, Application US/10142885
; Publication No. US20030157604A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C248
; CURRENT APPLICATION NUMBER: US/10/142,885
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-142-885-151

Query Match      27.7%; Score 184; DB 12; Length 2164;
Best Local Similarity 38.0%; Pred. No. 1.4e-08;
Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTECYCHCTGGADCTCTDACTGCGNCPNAHTCT-----DSKNVCVKAATCTGST 71
DB 749 CCCAACCCACTGGAGCTCCA-ACTGCACAGAGTCCCGACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATCTNSTGCPG 111
DB 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 9
US-10-158-790-151
; Sequence 151, Application US/10158790
; Publication No. US20030180879A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C448
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; CURRENT APPLICATION NUMBER: US/10/158,790
; CURRENT FILING DATE: 2002-05-30
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-158-790-151

Query Match          27.7%; Score 184; DB 12; Length 2164;
Best Local Similarity 38.0%; Pred. No. 1.4e-08;
Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTCYCHCTGGADCTCTDACTGCGNCPNAHTCT-----DSKNVCVKAATCTGST 71
DB 749 CCCAACCCACTGGAGTCCA-ACTGCACAGAGTCCCCACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATCTNSTGCGP 111
DB 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 10
US-10-137-871-151
; Sequence 151, Application US/10137871
; Publication No. US20030207350A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C153
; CURRENT APPLICATION NUMBER: US/10/137,871
; CURRENT FILING DATE: 2002-05-03
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-137-871-151

Query Match          27.7%; Score 184; DB 12; Length 2164;
Best Local Similarity 38.0%; Pred. No. 1.4e-08;
Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTCYCHCTGGADCTCTDACTGCGNCPNAHTCT-----DSKNVCVKAATCTGST 71
DB 749 CCCAACCCACTGGAGTCCA-ACTGCACAGAGTCCCCACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATCTNSTGCGP 111
DB 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 11
US-10-140-805-151
; Sequence 151, Application US/10140805
; Publication No. US20030207417A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C176
; CURRENT APPLICATION NUMBER: US/10/140,805
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-805-151

Query Match          27.7%; Score 184; DB 12; Length 2164;
Best Local Similarity 38.0%; Pred. No. 1.4e-08;
Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTCYCHCTGGADCTCTDACTGCGNCPNAHTCT-----DSKNVCVKAATCTGST 71
DB 749 CCCAACCCACTGGAGTCCA-ACTGCACAGAGTCCCCACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATCTNSTGCGP 111
DB 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 12
US-10-140-864-151
; Sequence 151, Application US/10140864
; Publication No. US20030207419A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C184
; CURRENT APPLICATION NUMBER: US/10/140,864
; CURRENT FILING DATE: 2002-05-07
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; Prior Application removed - See Palm or File Wrapper  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 151

; LENGTH: 2164

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-140-864-151

Query Match 27.7%; Score 184; DB 12; Length 2164;

Best Local Similarity 38.0%; Pred. No. 1.4e-08;

Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTEYCHTGGADCTSDTDACTGCGNCPNAHTCT-----DSKNVKAATCTGST 71

Db 749 CCCAACCCACTGGAGTCCA-AC TGACACAGAGTCCCGACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATAC TNSTGCPG 111

Db 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 13

US-10-140-923-151

; Sequence 151, Application US/10140923

; Publication No. US20030207355A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C188

; CURRENT APPLICATION NUMBER: US/10/140,923

; CURRENT FILING DATE: 2002-05-07

; Prior Application removed - See Palm or File Wrapper

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 151

; LENGTH: 2164

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-140-923-151

Query Match 27.7%; Score 184; DB 12; Length 2164;

Best Local Similarity 38.0%; Pred. No. 1.4e-08;

Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTEYCHTGGADCTSDTDACTGCGNCPNAHTCT-----DSKNVKAATCTGST 71

Db 749 CCCAACCCACTGGAGTCCA-AC TGACACAGAGTCCCGACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATAC TNSTGCPG 111

Db 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 14

US-10-141-756-151

; Sequence 151, Application US/10141756

; Publication No. US20030207359A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C200

; CURRENT APPLICATION NUMBER: US/10/141,756

; CURRENT FILING DATE: 2002-05-08

; Prior Application removed - See File Wrapper or Palm

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 151

; LENGTH: 2164

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-141-756-151

Query Match 27.7%; Score 184; DB 12; Length 2164;

Best Local Similarity 38.0%; Pred. No. 1.4e-08;

Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY 21 CLCTEYCHTGGADCTSDTDACTGCGNCPNAHTCT-----DSKNVKAATCTGST 71

Db 749 CCCAACCCACTGGAGTCCA-AC TGACACAGAGTCCCGACAGAGGAGTCCAGCTCTGAC 807

QY 72 KNTARTCTNSKDCFEAKTCTDSTNCKYKATAC TNSTGCPG 111

Db 808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

RESULT 15

US-10-141-759-151

; Sequence 151, Application US/10141759

; Publication No. US20030207361A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C197

; CURRENT APPLICATION NUMBER: US/10/141,759

; CURRENT FILING DATE: 2002-05-08

; Prior Application removed - See File Wrapper or Palm

; NUMBER OF SEQ ID NOS: 550

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; SEQ ID NO 151
; LENGTH: 2164
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-141-759-151

Query Match      27.7% Score 184; DB 12; Length 2164;
Best Local Similarity 38.0%; Pred. No. 1.4e-08;
Matches 38; Conservative 4; Mismatches 42; Indels 16; Gaps 4;

QY      21 CLCTECYCHCTGGADCTCTDAGTCGCGNCPNAHTCT-----DSKNCVKAAATCTGTGT 71
Db      749 CCAACCCACTGGAGCTCCA-CTGCACACAGAGTCCCCGACAGAGGAGTCCAGCTCTGAC 807

QY      72 KONTARTCTNSKDCFEAKTCTDSTNCTNYKATACATNCTGCPG 111
Db      808 -CACACAC-----CCACTTCACATGCCACAGCTGAGCCAG 841

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Search completed: December 1, 2003, 07:29:01  
Job time : 372.512 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 1, 2003, 07:18:41 ; Search time 39.8049 Seconds  
(without alignments)  
55.604 Million cell updates/sec

**Title:** US-10-032-658-1

Perfect score: 42  
Sequence: 1 CTXSSXCXXAXT 12

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 673684 seqs, 184443283 residues

Total number of hits satisfying chosen parameters: 673684

Minimum DB seq length: 0

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 s

Database : Published Applications AA:\*

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2: /cgcn2\_6/p/ctodata/1/pubpaa/PCT\_NEW\_PUB.pcp.\*  
3: /cgcn2\_6/p/ctodata/1/pubpaa/US06\_NEW\_PUB.pcp.\*  
4: /cgcn2\_6/p/ctodata/1/pubpaa/US06\_PUBCOMB.pcp.\*  
5: /cgcn2\_6/p/ctodata/1/pubpaa/US07\_NEW\_PUB.pcp.\*  
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7: /cgcn2\_6/p/ctodata/1/pubpaa/US08\_NEW\_PUB.pcp.\*  
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12: /cgcn2\_6/p/ctodata/1/pubpaa/US09\_NEW\_PUB.pcp.\*  
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14: /cgcn2\_6/p/ctodata/1/pubpaa/US10B\_PUBCOMB.pcp.\*  
15: /cgcn2\_6/p/ctodata/1/pubpaa/US10C\_PUBCOMB.pcp.\*  
16: /cgcn2\_6/p/ctodata/1/pubpaa/US10\_NEW\_PUB.pcp.\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	33	78.6	148	14	US-10-032-658-15	Sequence 15, Appl
2	33	78.6	194	12	US-10-063-685-29	Sequence 29, Appl
3	33	78.6	1701	12	US-10-140-478-29	Sequence 29, Appl
4	33	78.6	1701	12	US-10-141-761-29	Sequence 29, Appl
5	33	78.6	1701	12	US-10-142-685-29	Sequence 29, Appl
6	33	78.6	1701	12	US-10-158-790-29	Sequence 29, Appl
7	33	78.6	1701	12	US-10-137-871-29	Sequence 29, Appl
8	33	78.6	1701	12	US-10-140-805-29	Sequence 29, Appl
9	33	78.6	1701	12	US-10-140-864-29	Sequence 29, Appl
10	33	78.6	1701	12	US-10-140-922-29	Sequence 29, Appl
11	33	78.6	1701	12	US-10-141-755-29	Sequence 29, Appl
12	33	78.6	1701	12	US-10-141-759-29	Sequence 29, Appl
13	33	78.6	1701	12	US-10-123-155-29	Sequence 29, Appl
14	33	78.6	1701	16	US-10-146-731-29	Sequence 29, Appl
15	33	78.6	2134	12	US-10-140-478-179	Sequence 179, Appl

16	33	78.6	2134	12	US-10-141-761-179	Sequence 179, App
17	33	78.6	2134	12	US-10-142-885-179	Sequence 179, App
18	33	78.6	2134	12	US-10-158-790-179	Sequence 179, App
19	33	78.6	2134	12	US-10-137-871-179	Sequence 179, App
20	33	78.6	2134	12	US-10-140-805-179	Sequence 179, App
21	33	78.6	2134	12	US-10-140-864-179	Sequence 179, App
22	33	78.6	2134	12	US-10-140-923-179	Sequence 179, App
23	33	78.6	2134	12	US-10-141-756-179	Sequence 179, App
24	33	78.6	2134	12	US-10-141-759-179	Sequence 179, App
25	33	78.6	2134	15	US-10-123-155-179	Sequence 179, App
26	33	78.6	2134	16	US-10-146-731-179	Sequence 179, App
27	33	78.6	2212	15	US-10-184-644-325	Sequence 325, App
28	33	78.6	2212	15	US-10-184-634-325	Sequence 325, App
29	33	78.6	2275	15	US-10-184-644-401	Sequence 401, App
30	33	78.6	2275	15	US-10-184-634-401	Sequence 401, App
31	33	78.6	2340	15	US-10-184-644-379	Sequence 379, App
32	33	78.6	2340	15	US-10-184-634-379	Sequence 379, App
33	33	78.6	2475	12	US-10-140-472-467	Sequence 467, App
34	33	78.6	2475	12	US-10-141-761-467	Sequence 467, App
35	33	78.6	2475	12	US-10-142-885-467	Sequence 467, App
36	33	78.6	2475	12	US-10-158-790-467	Sequence 467, App
37	33	78.6	2475	12	US-10-137-871-467	Sequence 467, App
38	33	78.6	2475	12	US-10-140-805-467	Sequence 467, App
39	33	78.6	2475	12	US-10-140-864-467	Sequence 467, App
40	33	78.6	2475	12	US-10-140-923-467	Sequence 467, App
41	33	78.6	2475	12	US-10-141-756-467	Sequence 467, App
42	33	78.6	2475	12	US-10-141-759-467	Sequence 467, App
43	33	78.6	2475	15	US-10-123-155-467	Sequence 467, App
44	33	78.6	2475	16	US-10-146-731-467	Sequence 467, App
45	33	78.6	2700	12	US-10-140-472-27	Sequence 27, Appl

## ALIGNMENTS

RESULT 1  
 US-10-032-658-15  
 ; Sequence 15, Application US/10032658  
 ; Publication No. US20020165383A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Graham, Laurie A.  
 ; Liou, Yih-Cherng  
 ; Walker, Virginia K.  
 ; Davies, Peter L.  
 ; TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
 ; NUMBER OF SEQUENCES: 22  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Townsend and Townsend and Crew LLP  
 ; STREET: Two Embarcadero Center, Eighth Floor  
 ; CITY: San Francisco  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 94111-3834  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/10/032,658  
 ; FILING DATE: 02-Jan-2002  
 ; CLASSIFICATION: <unknown>  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/882,907  
 ; FILING DATE: 26-JUN-1997  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Weber, Kenneth A.  
 ; REGISTRATION NUMBER: 31,677  
 ; REFERENCE/DOCKET NUMBER: 016252-002100US  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (415) 576-0200  
 ; TELEFAX: (415) 576-0300  
 ; INFORMATION FOR SEQ ID NO: 15:

SEQUENCE CHARACTERISTICS:  
LENGTH: 148 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 15:  
US-10-032-658-15

Query Match 78.6%; Score 33; DB 14; Length 148;  
Best Local Similarity 50.0%; Pred. No. 29;  
Matches 6; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSSXXCXXXT 12  
DB 115 CTGSSNCYTATT 126

## RESULT 2

US-10-063-685-29

; Sequence 29, Application US/10063685  
; Publication No. US20030180909A1  
; GENERAL INFORMATION:  
; APPLICANT: Eaton, Dan L.  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Grimaldi, Christopher J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Watanabe, Colin K.  
; APPLICANT: Wood, William I.  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3230R1C1  
; CURRENT APPLICATION NUMBER: US/10/063,685  
; CURRENT FILING DATE: 2002-05-08  
; Prior Application removed - See Palm or File Wrapper  
; NUMBER OF SEQ ID NOS: 170  
; SEQ ID NO 29  
; LENGTH: 494  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-063-685-29

Query Match 78.6%; Score 33; DB 12; Length 494;  
Best Local Similarity 41.7%; Pred. No. 77;  
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSSXXCXXXT 12  
DB 342 CTTTACTAATT 353

## RESULT 3

US-10-140-472-29

; Sequence 29, Application US/10140472  
; Publication No. US20030138888A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: Deforge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tumas, Daniel  
; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C168  
; CURRENT APPLICATION NUMBER: US/10/140,472  
; CURRENT FILING DATE: 2002-05-06  
; Prior Application removed - See File Wrapper or Palm  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 29  
; LENGTH: 1701  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-140-472-29

Query Match 78.6%; Score 33; DB 12; Length 1701;  
Best Local Similarity 41.7%; Pred. No. 2.1e+02;  
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSSXXCXXXT 12  
DB 1403 CTTTTCATATT 1414

## RESULT 4

US-10-141-761-29

; Sequence 29, Application US/10141761  
; Publication No. US20030148432A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: Deforge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tumas, Daniel  
; APPLICANT: Watanabe, Colin K  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C198  
; CURRENT APPLICATION NUMBER: US/10/141,761  
; CURRENT FILING DATE: 2002-05-08  
; Prior Application removed - See Palm or File Wrapper  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 29  
; LENGTH: 1701  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-141-761-29

Query Match 78.6%; Score 33; DB 12; Length 1701;  
Best Local Similarity 41.7%; Pred. No. 2.1e+02;  
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

QY 1 CTXSSXXCXXXT 12  
DB 1403 CTTTTCATATT 1414

## RESULT 5

US-10-142-885-29

; Sequence 29, Application US/10142885  
; Publication No. US20030157604A1  
; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tumas, Daniel  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C248  
; CURRENT APPLICATION NUMBER: US/10/142,885  
; CURRENT FILING DATE: 2002-05-10  
; Prior Application removed - See File Wrapper or Palm  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 29  
; LENGTH: 1701  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-142-885-29

Query Match 78.6%; Score 33; DB 12; Length 1701;  
Best Local Similarity 41.7%; Pred. No. 2.1e+02;  
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

OY 1 CTXSSXXCXXXT 12  
|||:|:|:|  
Db 1403 CTTTTCATATT 1414

RESULT 6  
US-10-158-790-29  
; Sequence 29, Application US/10158790  
; Publication No. US20030180879A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tumas, Daniel  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C448  
; CURRENT APPLICATION NUMBER: US/10/158,790  
; CURRENT FILING DATE: 2002-05-30  
; Prior Application removed - See File Wrapper or Palm  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 29  
; LENGTH: 1701  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-158-790-29

Query Match 78.6%; Score 33; DB 12; Length 1701;  
Best Local Similarity 41.7%; Pred. No. 2.1e+02;  
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

OY 1 CTXSSXXCXXXT 12  
|||:|:|:|  
Db 1403 CTTTTCATATT 1414

RESULT 7  
US-10-137-871-29  
; Sequence 29, Application US/10137871  
; Publication No. US20030207350A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tumas, Daniel  
; APPLICANT: Watanabe, Colin K  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C153  
; CURRENT APPLICATION NUMBER: US/10/137,871  
; CURRENT FILING DATE: 2002-05-03  
; Prior Application removed - See Palm or File Wrapper  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 29  
; LENGTH: 1701  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-137-871-29

Query Match 78.6%; Score 33; DB 12; Length 1701;  
Best Local Similarity 41.7%; Pred. No. 2.1e+02;  
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

OY 1 CTXSSXXCXXXT 12  
|||:|:~|:|  
Db 1403 CTTTTCATATT 1414

RESULT 8  
US-10-140-805-29  
; Sequence 29, Application US/10140805  
; Publication No. US20030207417A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tumas, Daniel



```
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C176
; CURRENT APPLICATION NUMBER: US/10/140.805
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 29
; LENGTH: 1701
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-805-29

Query Match      78.6%; Score 33; DB 12; Length 1701;
Best Local Similarity 41.7%; Pred. No. 2.1e+02;
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy      1 CTXSSXXCXXXT 12
Db      1403 CTTTTCATATT 1414

RESULT 9
US-10-140-864-29
; Sequence 29, Application US/10140864
; Publication No. US20030207419A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C184
; CURRENT APPLICATION NUMBER: US/10/140.864
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 29
; LENGTH: 1701
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-864-29

Query Match      78.6%; Score 33; DB 12; Length 1701;
Best Local Similarity 41.7%; Pred. No. 2.1e+02;
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy      1 CTXSSXXCXXXT 12
Db      1403 CTTTTCATATT 1414

RESULT 10
US-10-140-923-29
; Sequence 29, Application US/10140923
; Publication No. US20030207355A1
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; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C188
; CURRENT APPLICATION NUMBER: US/10/140.923
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 29
; LENGTH: 1701
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-923-29

Query Match      78.6%; Score 33; DB 12; Length 1701;
Best Local Similarity 41.7%; Pred. No. 2.1e+02;
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy      1 CTXSSXXCXXXT 12
Db      1403 CTTTTCATATT 1414

RESULT 11
US-10-141-756-29
; Sequence 29, Application US/10141756
; Publication No. US20030207359A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C200
; CURRENT APPLICATION NUMBER: US/10/141.756
; CURRENT FILING DATE: 2002-05-08
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 29
; LENGTH: 1701
; TYPE: DNA
; ORGANISM: Homo Sapien
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; Publication No. US2003013888A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gertitsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C168
; CURRENT APPLICATION NUMBER: US/10/140,472
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 179
; LENGTH: 2134
; TYPE: DNA
; ORGANISM: Homo Sapien
; FEATURE:
; NAME/KEY: unsure
; LOCATION: 2108
; OTHER INFORMATION: unknown base
US-10-140-472-179

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Query Match      78.6%; Score 33; DB 12; Length 2134;
Best Local Similarity 41.7%; Pred. No. 2.5e+02;
Matches 5; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

QY      1 CTXSSXXCXXXT 12
Db      440 CTATTCTAAAT 451

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Job time : 40.8049 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

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Run on: December 1, 2003, 07:18:41 ; Search time 79.6098 Seconds
        (without alignments)
        55.604 Million cell updates/sec
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**Title:** US-10-032-658-4

Perfect score:

Sequence: 1 XCTGXADCTSCTXACTGCGXCPNA 24

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 673684 seqs, 184443283 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:\*

- 1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pcp:
- 2: /cgn2\_6/ptodata/1/pubpaa/PC7\_NEW\_PUB.pcp:\*
- 3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pcp:\*
- 4: /cgn2\_6/ptodata/1/pubpaa/US06\_PUBCOMB.pcp:\*
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- 9: /cgn2\_6/ptodata/1/pubpaa/US09A\_PUBCOMB.pcp:
- 10: /cgn2\_6/ptodata/1/pubpaa/US09B\_PUBCOMB.pcp:
- 11: /cgn2\_6/ptodata/1/pubpaa/US09C\_PUBCOMB.pcp:
- 12: /cgn2\_6/ptodata/1/pubpaa/US09\_NEW\_PUB.pcp:
- 13: /cgn2\_6/ptodata/1/pubpaa/US10A\_PUBCOMB.pcp:
- 14: /cgn2\_6/ptodata/1/pubpaa/US10B\_PUBCOMB.pcp:
- 15: /cgn2\_6/ptodata/1/pubpaa/US10C\_PUBCOMB.pcp:
- 16: /cgn2\_6/ptodata/1/pubpaa/US10\_NEW\_PUB.pcp:
- 17: /cgn2\_6/ptodata/1/pubpaa/US60\_NEW\_PUB.pcp:
- 18: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pcp:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query		Length	DB	ID	Description
		Match	%				
1	126	96.2	124	14	US	US-10-032-658-17	Sequence 17, Appl
2	126	96.2	124	14	US	US-10-032-658-19	Sequence 19, Appl
3	126	96.2	148	14	US	US-10-032-658-15	Sequence 15, Appl
4	124	94.7	24	14	US	US-10-032-658-4	Sequence 4, Appl
5	124	94.7	112	14	US	US-10-032-658-11	Sequence 11, Appl
6	124	94.7	112	14	US	US-10-032-658-13	Sequence 13, Appl
7	83	63.4	1750	12	US	US-10-140-472-187	Sequence 187, App
8	83	63.4	1750	12	US	US-10-141-765-187	Sequence 187, App
9	83	63.4	1750	12	US	US-10-142-685-187	Sequence 187, App
10	83	63.4	1750	12	US	US-10-158-790-187	Sequence 187, App
11	83	63.4	1750	12	US	US-10-137-871-187	Sequence 187, App
12	83	63.4	1750	12	US	US-10-140-805-187	Sequence 187, App
13	83	63.4	1750	12	US	US-10-140-864-187	Sequence 187, App
14	83	63.4	1750	12	US	US-10-140-923-187	Sequence 187, App
15	83	63.4	1750	12	US	US-10-141-756-187	Sequence 187, App

[illegible]

## ALIGNMENTS

RESULT 1  
US-10-032-658-17  
Sequence 17, Application US/10032658  
Publication No. US20020165383A1  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
Liou, Yih-Cherng  
Walker, Virginia K.  
Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
City: San Francisco  
STATE: California  
COUNTRY: USA  
Zip: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/032,658  
FILING DATE: 02-Jan-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/862,907  
FILING DATE: 26-JUN-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 17:

SEQUENCE CHARACTERISTICS:  
LENGTH: 124 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 17:  
US-10-032-658-17

Query Match 96.2%; Score 126; DB 14; Length 124;  
Best Local Similarity 87.0%; Pred. No. 1.9e-08;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGADCTCTACTGCGXCPNA 24  
||| ||||| ||||| |||||  
Db 30 CTGADCTCTACTGCGXCPNA 52

## RESULT 2

US-10-032-658-19  
Sequence 19, Application US/10032658  
Publication No. US20020165383A1  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
Liou, Yih-Cherng  
Walker, Virginia K.  
Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/032,658  
FILING DATE: 02-Jan-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/882,907  
FILING DATE: 26-JUN-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 124 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 19:  
US-10-032-658-19

Query Match 96.2%; Score 126; DB 14; Length 124;  
Best Local Similarity 87.0%; Pred. No. 1.9e-08;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGADCTCTACTGCGXCPNA 24  
||| ||||| ||||| |||||  
Db 30 CTGADCTCTACTGCGXCPNA 52

## RESULT 3

US-10-032-658-15  
Sequence 15, Application US/10032658  
Publication No. US20020165383A1  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
Liou, Yih-Cherng  
Walker, Virginia K.  
Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/032,658  
FILING DATE: 02-Jan-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/882,907  
FILING DATE: 26-JUN-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Weber, Kenneth A.  
REGISTRATION NUMBER: 31,677  
REFERENCE/DOCKET NUMBER: 016252-002100US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 148 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 15:  
U -10-032-658-15

Query Match 96.2%; Score 126; DB 14; Length 148;  
Best Local Similarity 87.0%; Pred. No. 2.3e-08;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGADCTCTACTGCGXCPNA 24  
||| ||||| ||||| |||||  
Db 30 CTGADCTCTACTGCGXCPNA 52

## RESULT 4

US-10-032-658-4  
Sequence 4, Application US/10032658  
Publication No. US20020165383A1  
GENERAL INFORMATION:  
APPLICANT: Graham, Laurie A.  
Liou, Yih-Cherng  
Walker, Virginia K.  
Davies, Peter L.  
TITLE OF INVENTION: Tenebrio Antifreeze Proteins  
NUMBER OF SEQUENCES: 22  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:

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/
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/10/032,658
/ FILING DATE: 02-Jan-2002
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/882,907
/ FILING DATE: 26-JUN-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Weber, Kenneth A.
/ REGISTRATION NUMBER: 31,677
/ REFERENCE/DOCKET NUMBER: 016252-002100US
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 24 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: <Unknown>
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ FEATURE:
/ NAME/KEY: Peptide
/ LOCATION: 1..24
/ OTHER INFORMATION: /note= "N-terminal amino acid sequence
/ of YL-1, YL-2, YL-3 and YL-4"
/ FEATURE:
/ NAME/KEY: Modified-site
/ LOCATION: 1
/ OTHER INFORMATION: /product= "OTHER"
/ /note= "Xaa = Gln or His"
/ FEATURE:
/ NAME/KEY: Modified-site
/ LOCATION: 5
/ OTHER INFORMATION: /product= "OTHER"
/ /note= "Xaa = Ala or Gly"
/ FEATURE:
/ NAME/KEY: Modified-site
/ LOCATION: 13
/ OTHER INFORMATION: /product= "OTHER"
/ /note= "Xaa = Ala, Asp or Gly"
/ FEATURE:
/ NAME/KEY: Modified-site
/ LOCATION: 20
/ OTHER INFORMATION: /product= "OTHER"
/ /note= "Xaa = Asn or Ser"
/ SEQUENCE DESCRIPTION: SEQ ID NO: 4:
/
/ US-10-032-658-4
/
/ Query Match 94.7%; Score 124; DB 14; Length 24;
/ Best Local Similarity 100.0%; Pred. No. 8.4e-09;
/ Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
/
/ QY 2 CTGXADCTCTXACTGCGXCPNA 24
/ Db |||||
/
/ RESULT 5
/ US-10-032-658-11
/ Sequence 11, Application US/10032658
/ Publication No. US20020165383A1
/ GENERAL INFORMATION:
/ APPLICANT: Graham, Laurie A.
/ Liou, Yih-Cherng
/ Walker, Virginia K.
/ Davies, Peter L.
/ TITLE OF INVENTION: Tenebrio Antifreeze Proteins
/ NUMBER OF SEQUENCES: 22
/
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```
/
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/10/032,658
/ FILING DATE: 02-Jan-2002
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/882,907
/ FILING DATE: 26-JUN-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Weber, Kenneth A.
/ REGISTRATION NUMBER: 31,677
/ REFERENCE/DOCKET NUMBER: 016252-002100US
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 11:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 112 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 11:
/
/ US-10-032-658-11
/
/ Query Match 94.7%; Score 124; DB 14; Length 112;
/ Best Local Similarity 87.0%; Pred. No. 3.1e-08;
/ Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
/
/ QY 2 CTGXADCTCTXACTGCGXCPNA 24
/ Db |||||
/
/ RESULT 6
/ US-10-032-658-13
/ Sequence 13, Application US/10032658
/ Publication No. US20020165383A1
/ GENERAL INFORMATION:
/ APPLICANT: Graham, Laurie A.
/ Liou, Yih-Cherng
/ Walker, Virginia K.
/ Davies, Peter L.
/ TITLE OF INVENTION: Tenebrio Antifreeze Proteins
/ NUMBER OF SEQUENCES: 22
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: IBM PC compatible
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/10/032,658
/ FILING DATE: 02-Jan-2002
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/882,907
/
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; FILING DATE: 26-JUN-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Weber, Kenneth A.  
; REGISTRATION NUMBER: 31,677  
; REFERENCE/DOCKET NUMBER: 016252-002100US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 112 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:  
US-10-032-658-13

Query Match 94.7%; Score 124; DB 14; Length 112;  
Best Local Similarity 87.0%; Pred. No. 3.1e-08;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CTGXADCTCTCTACTCGCPNA 24  
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Db 30 CTGGADCTCTCTACTCGCPNA 52

RESULT 7  
US-10-140-472-187  
; Sequence 187, Application US/10140472  
; Publication No. US2003013888A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tamas, Daniel  
; APPLICANT: Watanabe, Colin K  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C168  
; CURRENT APPLICATION NUMBER: US/10/140,472  
; CURRENT FILING DATE: 2002-05-06  
; Prior Application removed - See File Wrapper or Palm  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 187  
; LENGTH: 1750  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-140-472-187

Query Match 63.4%; Score 83; DB 12; Length 1750;  
Best Local Similarity 72.2%; Pred. No. 0.03;  
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTGXADCTCTCTACTCGC 19  
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Db 264 CTGAAGCTCTCTACTACG 281

RESULT 8  
US-10-141-761-187  
; Sequence 187, Application US/10141761

; Publication No. US20030148432A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tamas, Daniel  
; APPLICANT: Watanabe, Colin K  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C198  
; CURRENT APPLICATION NUMBER: US/10/141,761  
; CURRENT FILING DATE: 2002-05-08  
; Prior Application removed - See File Wrapper or Palm  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 187  
; LENGTH: 1750  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
US-10-141-761-187

Query Match 63.4%; Score 83; DB 12; Length 1750;  
Best Local Similarity 72.2%; Pred. No. 0.03;  
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTGXADCTCTCTACTCGC 19  
||| ||||| ||||| ||||| |||||  
Db 264 CTGAAGCTCTCTACTACG 281

RESULT 9  
US-10-142-885-187  
; Sequence 187, Application US/10142885  
; Publication No. US20030157604A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tamas, Daniel  
; APPLICANT: Watanabe, Colin K  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C248  
; CURRENT APPLICATION NUMBER: US/10/142,885  
; CURRENT FILING DATE: 2002-05-10  
; Prior Application removed - See File Wrapper or Palm  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 187  
; LENGTH: 1750  
; TYPE: DNA  
US-10-142-885-187

Query Match 63.4%; Score 83; DB 12; Length 1750;  
Best Local Similarity 72.2%; Pred. No. 0.03;  
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 2 CTGXADCTCTCTACTCGC 19  
||| ||||| ||||| ||||| |||||  
Db 264 CTGAAGCTCTCTACTACG 281

RESULT 8  
US-10-141-761-187  
; Sequence 187, Application US/10141761





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; Sequence 187, Application US/10140864
; Publication No. US20030207419A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C184
; CURRENT APPLICATION NUMBER: US/10/140,864
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 187
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
; US-10-140-864-187

Query Match      63.4%; Score 83; DB 12; Length 1750;
Best Local Similarity 72.2%; Pred. No. 0.03;
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY      2 CTGXADCTCTCTXACTGCG 19
      |||||:|||||
Db      264 CTGAACCTCTGACTACG 281

RESULT 14
US-10-140-923-187
; Sequence 187, Application US/10140923
; Publication No. US20030207355A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C188
; CURRENT APPLICATION NUMBER: US/10/140,923
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 187
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
; US-10-140-923-187

Query Match      63.4%; Score 83; DB 12; Length 1750;
Best Local Similarity 72.2%; Pred. No. 0.03;
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY      2 CTGXADCTCTCTXACTGCG 19
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Db      264 CTGAACCTCTGACTACG 281
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; TYPE: DNA
; ORGANISM: Homo Sapien
; US-10-140-923-187

Query Match      63.4%; Score 83; DB 12; Length 1750;
Best Local Similarity 72.2%; Pred. No. 0.03;
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY      2 CTGXADCTCTCTXACTGCG 19
      |||||:|||||
Db      264 CTGAACCTCTGACTACG 281

RESULT 15
US-10-141-756-187
; Sequence 187, Application US/10141756
; Publication No. US20030207359A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C200
; CURRENT APPLICATION NUMBER: US/10/141,756
; CURRENT FILING DATE: 2002-05-08
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 187
; LENGTH: 1750
; TYPE: DNA
; ORGANISM: Homo Sapien
; US-10-141-756-187

Query Match      63.4%; Score 83; DB 12; Length 1750;
Best Local Similarity 72.2%; Pred. No. 0.03;
Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY      2 CTGXADCTCTCTXACTGCG 19
      |||||:|||||
Db      264 CTGAACCTCTGACTACG 281

Search completed: December 1, 2003, 07:29:00
Job time : 79.6098 secs
```

GenCore version 5.1.6  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 1, 2003, 07:18:41 ; Search time 53.0732 Seconds  
(without alignments)  
55.604 Million cell updates/sec

Title: US-10-032-658-3

Perfect score: 64

Sequence: 1 XCTXXXCTXCTXCT 16

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 673684 seqs, 184443283 residues

Total number of hits satisfying chosen parameters: 673684

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications\_AA.\*

1: /cgn2\_6/prodata/1/pubpaa/US07\_PUBCOMB.pep.\*  
2: /cgn2\_6/prodata/1/pubpaa/US07\_PUBCOMB.pep.\*  
3: /cgn2\_6/prodata/1/pubpaa/US05\_NEW\_PUB.pep.\*  
4: /cgn2\_6/prodata/1/pubpaa/US05\_PUBCOMB.pep.\*  
5: /cgn2\_6/prodata/1/pubpaa/US07\_NEW\_PUB.pep.\*  
6: /cgn2\_6/prodata/1/pubpaa/US07\_PUBCOMB.pep.\*  
7: /cgn2\_6/prodata/1/pubpaa/US08\_NEW\_PUB.pep.\*  
8: /cgn2\_6/prodata/1/pubpaa/US08\_PUBCOMB.pep.\*  
9: /cgn2\_6/prodata/1/pubpaa/US09A\_PUBCOMB.pep.\*  
10: /cgn2\_6/prodata/1/pubpaa/US09B\_PUBCOMB.pep.\*  
11: /cgn2\_6/prodata/1/pubpaa/US09C\_PUBCOMB.pep.\*  
12: /cgn2\_6/prodata/1/pubpaa/US09\_NEW\_PUB.pep.\*  
13: /cgn2\_6/prodata/1/pubpaa/US10A\_PUBCOMB.pep.\*  
14: /cgn2\_6/prodata/1/pubpaa/US10B\_PUBCOMB.pep.\*  
15: /cgn2\_6/prodata/1/pubpaa/US10C\_PUBCOMB.pep.\*  
16: /cgn2\_6/prodata/1/pubpaa/US10\_NEW\_PUB.pep.\*  
17: /cgn2\_6/prodata/1/pubpaa/US60\_NEW\_PUB.pep.\*  
18: /cgn2\_6/prodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	55	85.9	2477	12	US-10-140-472-331
2	55	85.9	2477	12	US-10-141-761-331
3	55	85.9	2477	12	US-10-142-885-331
4	55	85.9	2477	12	US-10-158-790-331
5	55	85.9	2477	12	US-10-137-871-331
6	55	85.9	2477	12	US-10-140-805-331
7	55	85.9	2477	12	US-10-140-864-331
8	55	85.9	2477	12	US-10-140-923-331
9	55	85.9	2477	12	US-10-141-756-331
10	55	85.9	2477	12	US-10-141-759-331
11	55	85.9	2477	12	US-10-123-155-331
12	55	85.9	2477	16	US-10-146-731-331
13	54	84.4	148	14	US-10-032-658-15
14	54	84.4	539	15	US-10-184-644-531
15	54	84.4	539	15	US-10-184-634-531

16	54	84.4	630	11	US-09-791-279-86	Sequence 86, Appl
17	54	84.4	1750	12	US-10-140-472-187	Sequence 187, App
18	54	84.4	1750	12	US-10-141-761-187	Sequence 187, App
19	54	84.4	1750	12	US-10-142-885-187	Sequence 187, App
20	54	84.4	1750	12	US-10-158-790-187	Sequence 187, App
21	54	84.4	1750	12	US-10-137-871-187	Sequence 187, App
22	54	84.4	1750	12	US-10-140-805-187	Sequence 187, App
23	54	84.4	1750	12	US-10-140-864-187	Sequence 187, App
24	54	84.4	1750	12	US-10-140-923-187	Sequence 187, App
25	54	84.4	1750	12	US-10-141-756-187	Sequence 187, App
26	54	84.4	1750	12	US-10-141-759-187	Sequence 187, App
27	54	84.4	1750	15	US-10-184-644-397	Sequence 397, App
28	54	84.4	1750	15	US-10-184-634-397	Sequence 397, App
29	54	84.4	1750	15	US-10-123-155-187	Sequence 187, App
30	54	84.4	1750	16	US-10-146-731-187	Sequence 187, App
31	54	84.4	2128	15	US-10-184-644-171	Sequence 171, App
32	54	84.4	2128	15	US-10-184-634-171	Sequence 171, App
33	53	82.8	124	14	US-10-032-658-17	Sequence 17, Appl
34	53	82.8	124	14	US-10-032-658-19	Sequence 19, Appl
35	53	82.8	1917	15	US-10-184-644-159	Sequence 159, App
36	53	82.8	1917	15	US-10-184-634-159	Sequence 159, App
37	53	82.8	2120	12	US-10-140-472-73	Sequence 73, Appl
38	53	82.8	2120	12	US-10-141-761-73	Sequence 73, Appl
39	53	82.8	2120	12	US-10-142-885-73	Sequence 73, Appl
40	53	82.8	2120	12	US-10-158-790-73	Sequence 73, Appl
41	53	82.8	2120	12	US-10-137-871-73	Sequence 73, Appl
42	53	82.8	2120	12	US-10-140-805-73	Sequence 73, Appl
43	53	82.8	2120	12	US-10-140-864-73	Sequence 73, Appl
44	53	82.8	2120	12	US-10-140-923-73	Sequence 73, Appl
45	53	82.8	2120	12	US-10-141-756-73	Sequence 73, Appl

#### ALIGNMENTS

RESULT 1  
US-10-140-472-331  
; Sequence 331, Application US/10140472  
; Publication No. US2003013888A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Beresini, Maureen  
; APPLICANT: DeForge, Laura  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Filvaroff, Ellen  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Gerritsen, Mary E.  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Sherwood, Steven  
; APPLICANT: Smith, Victoria  
; APPLICANT: Stewart, Timothy A.  
; APPLICANT: Tamas, Daniel  
; APPLICANT: Watanabe, Colin K  
; APPLICANT: Wood, William  
; APPLICANT: Zhang, Zemin  
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC  
; FILE REFERENCE: P3330R1C168  
; CURRENT APPLICATION NUMBER: US/10/140,472  
; CURRENT FILING DATE: 2002-05-06  
; Prior Application removed - See File Wrapper or Palm  
; NUMBER OF SEQ ID NOS: 550  
; SEQ ID NO 331  
; LENGTH: 2477  
; TYPE: DNA  
; ORGANISM: Homo Sapien  
; US-10-140-472-331

Query Match 85.9%; Score 55; DB 12; Length 2477;  
Best Local Similarity 53.3%; Pred. No. 6.7;  
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;



```

; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C153
; CURRENT APPLICATION NUMBER: US/10/137,871
; CURRENT FILING DATE: 2002-05-03
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 331
; LENGTH: 2477
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-137-871-331

Query Match      85.9%; Score 55; DB 12; Length 2477;
Best Local Similarity 53.3%; Pred. No. 6.7;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      2 CTXXXXCTXXCT 16
Db      1581 CTTGTCTACTTCT 1595

RESULT 6
US-10-140-805-331
; Sequence 331, Application US/10140805
; Publication No. US20030207417A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C176
; CURRENT APPLICATION NUMBER: US/10/140,805
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 331
; LENGTH: 2477
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-805-331

Query Match      85.9%; Score 55; DB 12; Length 2477;
Best Local Similarity 53.3%; Pred. No. 6.7;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      2 CTXXXXCTXXCT 16
Db      1581 CTTGTCTACTTCT 1595

RESULT 7
US-10-140-864-331
; Sequence 331, Application US/10140864
; Publication No. US20030207419A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C184
; CURRENT APPLICATION NUMBER: US/10/140,864
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 331
; LENGTH: 2477
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-864-331

Query Match      85.9%; Score 55; DB 12; Length 2477;
Best Local Similarity 53.3%; Pred. No. 6.7;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      2 CTXXXXCTXXCT 16
Db      1581 CTTGTCTACTTCT 1595

RESULT 8
US-10-140-923-331
; Sequence 331, Application US/10140923
; Publication No. US20030207355A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C176
; CURRENT APPLICATION NUMBER: US/10/140,805
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 331
; LENGTH: 2477
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-140-805-331

Query Match      85.9%; Score 55; DB 12; Length 2477;
Best Local Similarity 53.3%; Pred. No. 6.7;
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      2 CTXXXXCTXXCT 16
Db      1581 CTTGTCTACTTCT 1595
```

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C188

; CURRENT APPLICATION NUMBER: US/10/140,923

; CURRENT FILING DATE: 2002-05-07

; Prior Application removed - See Palm or File Wrapper

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 331

; LENGTH: 2477

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-140-923-331

Query Match 85.9%; Score 55; DB 12; Length 2477;

Best Local Similarity 53.3%; Pred. No. 6.7;

Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXCTXXCT 16

||| ||| ||| |||

Db 1581 CTTGTCTACTTTCT 1595

RESULT 9

US-10-141-756-331

; Sequence 331, Application US/10141756

; Publication No. US20030207359A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C200

; CURRENT APPLICATION NUMBER: US/10/141,756

; CURRENT FILING DATE: 2002-05-08

; Prior Application removed - See File Wrapper or Palm

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 331

; LENGTH: 2477

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-141-756-331

Query Match 85.9%; Score 55; DB 12; Length 2477;

Best Local Similarity 53.3%; Pred. No. 6.7;

Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXCTXXCT 16

||| ||| ||| |||

Db 1581 CTTGTCTACTTTCT 1595

RESULT 10

US-10-141-759-331

; Sequence 331, Application US/10141759

; Publication No. US20030207361A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C30

; CURRENT APPLICATION NUMBER: US/10/123,155

; CURRENT FILING DATE: 2002-04-15

; Prior Application removed - See Palm or File Wrapper

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 331

; LENGTH: 2477

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-123-155-331

Query Match 85.9%; Score 55; DB 15; Length 2477;

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C197

; CURRENT APPLICATION NUMBER: US/10/141,759

; CURRENT FILING DATE: 2002-05-08

; Prior Application removed - See File Wrapper or Palm

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 331

; LENGTH: 2477

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-141-759-331

Query Match 85.9%; Score 55; DB 12; Length 2477;

Best Local Similarity 53.3%; Pred. No. 6.7;

Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTXCTXXCT 16

||| ||| ||| |||

Db 1581 CTTGTCTACTTTCT 1595

RESULT 11

US-10-123-155-331

; Sequence 331, Application US/10123155

; Publication No. US20030068794A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: P3330R1C30

; CURRENT APPLICATION NUMBER: US/10/123,155

; CURRENT FILING DATE: 2002-04-15

; Prior Application removed - See Palm or File Wrapper

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 331

; LENGTH: 2477

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-123-155-331

Query Match 85.9%; Score 55; DB 15; Length 2477;

Best Local Similarity 53.3%; Pred. No. 6.7; Mismatches 0; Gaps 0;  
Matches 8; Conservative 0; Indels 7;

QY 2 CTXXXCTCTXXCT 16  
||| ||| |||  
Db 1581 CTTTGCTACTTCT 1595

## RESULT 12

US-10-146-731-331  
; Sequence 331, Application US/10146731

; Publication No. US20010129692A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Beresini, Maureen

; APPLICANT: DeForge, Laura

; APPLICANT: Desnoyers, Luc

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Sherwood, Steven

; APPLICANT: Smith, Victoria

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tamas, Daniel

; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: F330R1C323

; CURRENT APPLICATION NUMBER: US/10/146,731

; Prior Filing Date: 2002-05-15

; NUMBER OF SEQ ID NOS: 550

; SEQ ID NO 331

; LENGTH: 2477

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-146-731-331

Query Match 85.9%; Score 55; DB 16; Length 2477;  
Best Local Similarity 53.3%; Pred. No. 6.7; Mismatches 0; Gaps 0;  
Matches 8; Conservative 0; Indels 7;

QY 2 CTXXXCTCTXXCT 16  
||| ||| |||  
Db 1581 CTTTGCTACTTCT 1595

## RESULT 13

US-10-032-658-15

; Sequence 15, Application US/10032658

; Publication No. US20020165383A1

; GENERAL INFORMATION:

; APPLICANT: Graham, Laurie A.

; APPLICANT: Liou, Yih-Cherng

; APPLICANT: Walker, Virginia K.

; APPLICANT: Davies, Peter L.

; TITLE OF INVENTION: Tenebrio Antifreeze Proteins

; NUMBER OF SEQUENCES: 22

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

## RESULT 15

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/032,658

FILING DATE: 02-Jan-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/882,907

FILING DATE: 26-JUN-1997

ATTORNEY/AGENT INFORMATION:

NAME: Weber, Kenneth A.

REGISTRATION NUMBER: 31,677

REFERENCE/DOCKET NUMBER: 016252-00210005

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 15:

SEQUENCE CHARACTERISTICS:

LENGTH: 148 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 15:

US-10-032-658-15

Query Match 84.4%; Score 54; DB 14; Length 148;  
Best Local Similarity 53.3%; Pred. No. 1.2;  
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16  
||| ||| |||  
Db 30 CTGAADCTCTAACT 44

## RESULT 14

US-10-184-644-531

; Sequence 531, Application US/10184644

; Publication No. US20030044930A1

; GENERAL INFORMATION:

; APPLICANT: Baker, Kevin P.

; APPLICANT: Chen, Jian

; APPLICANT: Desnoyers, Luc

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Gurney, Austin L.

; APPLICANT: Pan, James

; APPLICANT: Smith, Victoria

; APPLICANT: Watanabe, Colin K.

; APPLICANT: Wood, William I.

; APPLICANT: Zhang, Zemin

; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

; FILE REFERENCE: F3430R1C227

; CURRENT APPLICATION NUMBER: US/10/184,644

; Prior Filing Date: 2002-06-28

; NUMBER OF SEQ ID NOS: 612

; SEQ ID NO 531

; LENGTH: 539

; TYPE: DNA

; ORGANISM: Homo Sapien

US-10-184-644-531

Query Match 84.4%; Score 54; DB 15; Length 539;  
Best Local Similarity 53.3%; Pred. No. 3.1;  
Matches 8; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 CTXXXCTCTXXCT 16  
||| ||| |||  
Db 212 CTGATCTCTGTCT 226

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US-10-184-634-531
; Sequence 531, Application US/10184634
; Publication No. US20030068684A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
; APPLICANT: Desnoyers, Luc
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Pan, James
; APPLICANT: Smith, Victoria
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Wood, William I.
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: F3430R1C217
; CURRENT APPLICATION NUMBER: US/10/184,634
; CURRENT FILING DATE: 2002-06-28
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 531
; LENGTH: 539
; TYPE: DNA
; ORGANISM: Homo Sapien
US-10-184-634-531

Query Match      84.4%; Score 54; DB 15; Length 539;
Best Local Similarity 53.3%; Pred No: 3.1;
Matches      8; Conservative      0; Mismatches      7; Indels      0; Gaps      0;

QY      2 CTXXXCTCTCTXXCT 16
Db      212 CTGATCTCTCTCT 226

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Search completed: December 1, 2003, 07:29:00  
Job time : 53.0732 secs